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OVERSIGHT ON OCCUPATIONAL DISEASE, 1984

HEARINGS

BEFORE THE

SUBCOMMITTEE ON LABOR

OF THE

COMMITTEE ON
LABOR AND HUMAN RESOURCES
UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

INVESTIGATION AS TO WHETHER OR NOT THERE IS A NATIONAL ASBESTOS CRISIS; AND IF SO, WHAT SHOULD BE DONE ABOUT IT

APRIL 24, 30, AND MAY 21, 1984

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OVERSIGHT ON OCCUPATIONAL DISEASE, 1984

TUESDAY, APRIL 24, 1984

U.S. SENATE,
SUBCOMMITTEE ON LABOR,
COMMITTEE ON LABOR AND HUMAN RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:05 p.m., in room SD-430, Dirksen Senate Office Building, Senator Don Nickles (chairman of the subcommittee) presiding.

Present: Senators Nickles, Riegle, and Kennedy.

OPENING STATEMENT OF SENATOR NICKLES

Senator NICKLES. Good afternoon.

Today we are beginning the Labor Subcommittee's hearing on occupational disease, in general, and asbestos-related occupational disease, in particular. The issues to be addressed are very complex, and analysis of these issues by different experts has produced quite different opinions.

This subcommittee plans to hear from many of these experts so that we may determine for ourselves, first, whether or not there is a national asbestos crisis; and second, if so, what should be done about it.

The first area to be explored today is the universe of disease and potential number of victims associated with asbestos. The chart behind me graphically illustrates the large variation in projections. I want to thank the Congressional Budget Office for developing these projections from 1985 to the year 2000 from several studies

I also want to thank Senator Armstrong and his staff for their assistance in producing the charts used this afternoon.

Compiling the first chart, CBO used a 1-year survival rate for victims of mesothelioma, a 2-year survival rate for victims of lung cancer, and 2 years for gastrointestinal cancer. Therefore, only excess deaths and not disabilities are used for these three categories of diseases. No such survival rate was available from CBO for asbestosis. So excess disabilities are presented.

As can be seen, one projection is almost twice as high as the other. Today we will be hearing from medical experts on these differences, as well as obtaining their views on how to best compensate the victims.

Obviously, mere numbers and diagnosis alone cannot begin to address the problems faced by victims of occupational disease. Therefore, we will also be hearing from the Asbestos Victims of America to obtain a more personal view of their problems.

Finally, today we will begin discussing what a victim can expect after he or she has been diagnosed as having an asbestos-related occupational disease.

The second chart reflects the findings of the 1983 Rand Corporation's Institute for Civil Justice. As can be seen, according to this study defendants and insurers spent approximately $95,000 per asbestos disease case. Of this total, 37 percent, or approximately $35,000, went for defense litigation cost; 26 percent, or about $25,000, was for the plaintiff's legal fees; and the remaining 37 percent, or about $35,000, went to the victim.

It is shocking that 63 percent of every dollar spent to compensate an asbestos-related occupational disease victim went to lawyers and for legal expenses rather than to the claimant. The amount of average total compensation per victim is in dispute, as will also be presented this afternoon.

We have a busy lineup today, and I am pleased Senator Riegle has joined us. His input is appreciated on this very difficult and complicated issue.

Senator Riegle, do you have opening comments?

Senator RIEGLE. Thank you, Mr. Chairman.

This afternoon's hearing is the first of several hearings studying the tragedy of occupational disease. This committee has not examined the occupational disease problem on a comprehensive basis since the 1970's, yet the occupational disease problem is certainly a major one.

I want to commend you, Senator Nickles, for scheduling these hearings which can only serve to further our understanding of the issue and to encourage appropriate solutions.

Thousands of American workers have contracted debilitating and often fatal diseases as a result of exposure to substances in the workplace. Diseases arising from exposure to asbestos have probably received the most publicity in recent months. They include lung cancer, mesothelioma, and asbestosis.

Studies have established conclusively the relationship that exists between these horrible diseases and asbestos exposure. Although asbestos-related diseases have received the most publicity, studies have shown that many other diseases exist that result from exposure to other toxic materials in the workplace.

Sadly, the toxic nature of these materials often remains undiscovered until our workers exhibit signs of disease, which in many cases come many years later.

I am hopeful that these hearings will focus on some of these diseases in addition to those resulting from asbestos exposure. Most of the recent asbestos publicity has occurred because of workers' attempts to receive just compensation for their illness. A great majority of these victims have filed product liability suits against manufacturers in lieu of filing claims under the State and Federal workers compensation systems.

The traditional workers compensation system has proven to be unfair and unworkable in compensating victims of occupational diseases. Indeed, few victims of occupational disease ever receive workers compensation benefits, to which they should be entitled. American workers who have suffered these debilitating diseases, as well as the surviving family members of deceased victims, deserve a system that provides adequate benefits, quickly and fairly.

The inability of the workers compensation system to address this problem has caused a flurry of product liability litigation in our courts. Thousands of these suits have been filed against asbestos manufacturers by plaintiffs who were exposed to their products and who have contracted asbestos-related disease.

Profitable companies, such as the Manville Corp., have filed for bankruptcy in order to receive court protection from claims. Thousands of disease-ridden workers may be left without an adequate remedy. Many of these workers have been forced to turn to the social security disability and to the welfare systems at the taxpayers 'expense.

I believe these hearings will show that many parties are dissatisfied with the way in which victims of occupational diseases receive compensation. Statistics reveal that too much money is expended on administrative and litigation costs.

A legislative scheme designed to address the problem may prove necessary, and I want to pledge my support to work with all of the parties in an effort to formulate a solution that will ensure that our workers will receive the benefits to which they are rightly entitled.

Mr. Chairman, I would like to make one final point. Compensation becomes a critical issue only if victims exist. We as a nation must do more to prevent the occurrence of occupational diseases. Extensive research is required to reveal and replace those substances in the workplace that harm workers.

The establishment of medical assistance programs and mandatory surveillance programs may also be required to monitor exposure levels in the workplace for those workers presently at risk. I would hope that these hearings would be able to address this other critical issue of prevention.

I would finally say that while today we are dealing with certain occupational contracted diseases at the end of a lifetime of work or after many years of exposure, we have other situations occurring, I am certain, at this very hour and day in numerous work locations around the country of people being exposed to other kinds of exotic chemicals and disease-causing substances. We will not know and will not find ourselves responding to the results of these exposures until years down the road when there may also be effects such as disruption to the reproductive process in both men and women and other kinds of subsidiary effects that can have consequences beyond just the social and human harm. I am talking about consequences in terms of hundreds of millions, if not billions, of dollars of damage, and unnecessary medical costs that will accrue later on down the line.

So I would hope that we would use these hearings as a way to broaden our understanding of this problem and find a way to perhaps identify other problems in the making. If we can find them now and head them off, it will save us a lot of heartache and expense later on down the line.

Thank you, Mr. Chairman.

Senator NICKLES. Thank you, Senator Riegle. For your information, and for the audience's information, we also have hearings scheduled on April 30 and May 21. We plan on doing a lot of work in this area. Needless to say, this issue is a very complicated and difficult subject. I am sure that if we are successful in a legislative solution, it will take a bipartisan approach, and I am certainly appreciative of your attendance today.

Our first panelist is Dr. William Nicholson from the Environmental Sciences Laboratory, Mount Sinai School of Medicine, City University of New York, N.Y.

Welcome, Dr. Nicholson. Your statement will be entered into the record in full, and we would appreciate it if everyone would adhere to a maximum of 10 minutes in their remarks.

Thank you.

STATEMENT OF WILLIAM J. NICHOLSON, PH.D., ENVIRONMENTAL SCIENCES LABORATORY, MOUNT SINAI SCHOOL OF MEDICINE, CITY UNIVERSITY OF NEW YORK

Dr. **Nicholson**. Thank you, Senator Nickles, Senator Riegle.

I am very happy to be here today and speak about the issues with which you are concerned. My name is William J. Nicholson, and I am an associate professor of Community Medicine and associate director of the Environmental Sciences Laboratory of Mount Sinai Medical Center, where I have been employed for the past 15 years.

At this hearing I would like to speak of two aspects of asbestos disease that already have been mentioned. One is the consequences of past exposures to asbestos fibers and the other is the consequences of existing asbestos standards and our efforts to prevent disease in the future.

Let me first consider the projections of disease from past exposure. At Mount Sinai School of Medicine, we have conducted an analysis of exposure and disease potential in 11 major occupational categories where asbestos exposure was likely. Using data on the age, time, and dose dependence of lung cancer, mesothelioma and other asbestos malignancies, we estimate that 8,800 asbestos-related cancer deaths are occurring this year. The toll will rise to about 10,000 annually by the year 2000, and will continue until the year 2030, all from exposures that took place prior to 1980. Overall, it is estimated that 350,000 deaths will occur before the toll from these exposures is ended unless some intervention is developed to prevent the inevitable mortality.

In addition to deaths from malignant disease, asbestosis will claim other lives and will lead to significant disability among many individuals. One can estimate, and here the estimates are much more uncertain, that there will be 200,000 or 300,000 individuals, perhaps even more that will suffer significant impairment or disability from the consequences of asbestos exposure.

Most of the deaths are occurring among individuals who were working near the installation, repair or removal of thermal insulation materials. Most of those affected had relatively low exposure. This is not because the risks are high among those with low exposure, but because so many were employed in such circumstances. For example, in World War II, 4½ million men and women were employed in shipbuilding, mostly in trades other than that of installing asbestos. But they were working individuals who did, and, thus, were also exposed to the fiber.

In the construction industry, an industry that employs 3 to 5 million individuals, depending upon the period of time, there also was ample opportunity for asbestos exposure. In this industry, from 1958 through 1972, there was widespread spraying of an asbestos containing fireproofing material on the steel work of high rise buildings, led to extensive worker exposure. While the toll from the World War II shipyard experience will soon be reaching its peak and declining, it will be replaced by one that will arise from the exposures that took place in the construction industry in the late 1950's and 1960's.

Overall, we have estimated that between 1940 and 1980, as many as 27.5 million individuals had some exposure to asbestos at work. Often this would have been a low exposure that I described. In fact, one-third of this group would have had an exposure less than that experienced by an asbestos factory worker or an insulator employed for 2 or 3 months. But nevertheless, these low exposures over all of the population that has experienced them can lead to the significant toll that I have described.

I emphasize the importance of these lower exposures because most asbestos disease will occur in individuals with less exposure than 4 to 5 years employment as an insulation worker. For mesothelioma low exposures do not create a problem. Any such malignancy can be attributed to occupation in an asbestos exposed individual. However, there are difficulties in attempting to ascertain the origin of a lung cancer in an individual with such lower exposures. It is not hard to ascribe lung cancer in an asbestos insulation worker employed for 25 years to his work. It is much more difficult to do so for somebody indirectly exposed to asbestos for 2 or 3 years, and this is an important issue in development of any compensation scheme for asbestos disease. Such individuals could receive appropriate compensation after consideration of their past risk.

With respect to mortality from current exposure levels, one can take experience from 11 or 12 cohort studies on the dose and time dependence of cancer and estimate what would be the risk of death for various proposed and existing standards. When this is done, one estimates that a group of individuals exposed for a working lifetime to the current occupational standard of two fibers per milliliter would have 6.5 percent of their deaths attributable to their work with asbestos.

It is a standard that certainly does not fulfill the purpose of the OSHA Act, "to assure as far as possible a safe and healthful working condition." In fact, in some of the cohort studies that were utilized, higher risks were seen. So there is an uncertainty of the estimate that 6.5 percent would be at risk if they were exposed to two fibers per milliliter. The number could be as high as 20 percent in some particular work circumstances. In other circumstances, it could be lower.

Even at the standard of .2 or .5 there is a significant risk, and thus, all efforts must be made to reduce exposures to the lowest level commensurate with existing technologies.

This leads to another issue with respect to standard setting. Numerical ceiling value on peak or time weighted average exposures are important, but most of the exposures in the future will come from asbestos that is already in place. There are 1 million tons of friable asbestos-containing material in place in schools, ships, offices, and industrial buildings. Repair and maintenance activities in those buildings and structures will lead to the dislodgement of that asbestos unless proper precautions are taken. Virtually none of this work will be monitored.

There is the need for the establishment of a code of work practices, an education program for workers and one for building managers so that proper care will be taken to minimize the exposure to workers and to other occupants of buildings. Further, there certainly is a need for an effective compliance program to provide guidance to workers and management and to enforce existing numerical standards.

We have projected disease going into the year 2030. More than a third of a million deaths are estimated to be forthcoming. This number will be increased by the inadequacies of our existing standards and the exposures of the future. So there is a need for governmental activity in both areas of concern: Equitable compensation for those victims already exposed and prevention of exposures for those currently at work.

If we do not undertake the second activity, you will be holding hearings well into the 21st century, again, on the problems of asbestos disease from exposures of the past. I hope that hearings of this type will soon end with effective resolution of the issues.

Thank you.

[The prepared statement of Mr. Nicholson follows:]

Testimony of William J. Nicholson, Ph.D.
Environmental Sciences Laboratory
Mount Sinai School of Medicine of
The City University of New York
New York, New York 10029

Subcommittee on Labor
Committee on Labor and Human Resources
United States Senate

April 24, 1984

My name is William J. Nicholson. I am an Associate Professor of Community Medicine and Associate Director of the Environmental Sciences Laboratory of Mount Sinai School of Medicine, where I have been employed since 1969. For the past 15 years, most of my work has been concerned with the quantification of health effects associated with asbestos exposure. In this, I have conducted industrial hygiene surveys of asbestos-exposed workers, directed clinical and statistical epidemiological studies to identify disease patterns among individuals exposed to asbestos, and, most recently, performed risk assessments of morbidity and mortality from current and past asbestos exposures.

At this Hearing, I would like to speak about two aspects of this research on asbestos disease. The first is the projections of mortality from exposures that have already occurred, and the second is the estimates of disease that may occur under current and proposed occupational standards for asbestos. It is tragic that we are still discussing the problems of asbestos exposure, a material that was shown to produce serious disease eight decades ago and greatly increased risk of cancer nearly 40 years ago. Yet today, among some groups of asbestos-exposed workers (insulators and some factory workers), one in five deaths is from lung cancer, one in ten from mesothelioma, one in ten from gastrointestinal cancer and one in 15 from asbestosis. About 40% of these workers' deaths can be ascribed to their occupational exposure to asbestos.

Let me consider to the projections of disease from past exposures. At Mount Sinai School of Medicine, we have recently conducted an analysis of exposure to disease disease and mortality in 11 major occupational categories having a high potential for asbestos exposure. Using these data and information on the age, time, and dose-dependence of lung cancer, mesothelioma and other asbestos-related malignancies, we estimate that 8,800 asbestos-related cancer deaths are occurring this year. This toll will rise to about 10,000 annually by the year 2000. From 1980 onwards, it is estimated there will be 350,000 deaths related to asbestos exposures that occurred between 1940 and 1980. In addition to the deaths from malignant disease, asbestosis will claim other lives. The mortality is even extended by the deaths among individuals who simply lived with asbestos workers or were exposed in other than occupational circumstances. Table 1 lists the estimated number of deaths by occupation along with data on the possible number of individuals exposed in these different work activities. More detailed data are available in a paper published in Volume 3 of the American Journal of Industrial Medicine (1982) which has been submitted for the Hearing record.

A review of Table 1 demonstrates that most deaths will occur among individuals who were exposed to fibers released during the installation, repair or removal of thermal asbestos-containing insulation materials. Ironically, most of the deaths will occur in workers who were exposed simply by working in the area where insulation application or removal was underway, such as in the hold of a ship, on a construction site, in a power plant, refinery or a chemical plant. Asbestos was not used in their own work as carpenters, electricians, shipfitters, etc. At this time, more deaths are occurring among current and former shipyard workers than among workers in any other category. This is the legacy of our vast shipbuilding effort during World War II, in which more than 4,500,000 workers were employed in the shipbuilding industry. However, in future years, the deaths related to shipbuilding will decrease as the toll from our wartime experience begins to pass. It will, however, be supplanted by an increasing number of deaths that will occur among individuals exposed in the construction industry. Here, the spraying of asbestos-containing fireproofing materials on the steel work of high rise buildings from 1958 through 1972 led to substantial exposures for all workers on such job sites. Considering all occupational categories, the peak of mortality will not occur until about the year 1995; at the present time, we have experienced only about one-third of the deaths that will occur from all asbestos exposures that occurred between 1940 and 1980.

A second important point that the work on past asbestos use revealed is the large number of individuals that have had some exposure. It is estimated that from 1940 to 1980, 27,500,000 individuals may have had some exposure to asbestos at work. However, because of the very high short-term labor turnover in most of industry, approximately 9,000,000 would have had an exposure less than that of an insulator or factory work employed for two or three months. Considering all exposure categories, most asbestos disease will occur in individuals whose exposure would have been less than that of an insulator or factory worker employed for four or five years. Only a small fraction of the deaths will occur in long-term heavily exposed workers. This is because of the limited number of individuals employed as insulators or in asbestos products manufacturing and the great numbers employed in the lower risk circumstances. I emphasize this point because it may lead to considerable difficulty in identifying a particular death as being asbestos-related. It is easy to ascribe the lung cancer death of an insulator employed for 25 years to an occupational exposure; it is not so easy to do so for some one indirectly exposed to asbestos in a refinery for two or three years.

With respect to estimates of mortality from current exposure levels, dose-response information is available from 12 epidemiological studies of asbestos-exposed workers. Using the geometric mean of the values from each of these studies, weighted by their statistical reliability, and a linear-dose response relationship, one can estimate the mortality from exposure to different concentrations of asbestos. Table 2 shows the mortality from different asbestos-related causes according to exposure level for three different periods of employment. These data have been used by OSHA in their risk assessment published with their proposal to reduce the workplace asbestos standard to 0.2 f/ml or 0.5 f/ml. As can be seen, employment for a working lifetime at 2 f/ml (the current OSHA standard) may lead to 6.5% of a group of workers' deaths being occupationally-related. This standard certainly does not fulfill the purpose of the OSHA Act "to assure so far as possible....safe and healthful working conditions." Parenthetically, because of the variablity in the different dose-response relationships for different exposure circumstances, the actual mortality in some cases could be two to three times higher. Even at the lower concentrations recently proposed by OSHA (0.2 and 0.5 f/ml) and NIOSH (0.1 f/ml), there will be some asbestos-related mortality. The only safe level that we know is no exposure. Thus, every effort should be made to achieve the lowest exposure possible in all work circumstances.

That leads to another aspect of standard setting. It is expected that most exposures in the future will be from asbestos already in place. One million tons of friable asbestos-containing material are in schools, ships, offices and industrial buildings as thermal or acoustic insulation. Repair and maintenance work can lead to dislodgement of this material with exposures to the workers directly involved and to other building occupants. To control exposures in such circumstances, a code of work practices must be established for repair and maintenance work involving potential asbestos exposure. A simple numerical standard is not enough. Maintenance work is seldom monitored. Employers and workers must be educated about the effects of asbestos and effective means to prevent exposure. Finally, an effective compliance program must be available to provide guidance on control measures and to enforce the existing numerical standards and work practices.

Table 1

The projected annual excess deaths from all asbestos-related cancer in selected occupations and industries, 1982 - 2027

Industry or occupation	Number potentially exposed (in thousands)[a]	Number decreased in calendar year									
		1982	1987	1992	1997	2002	2007	2012	2017	2022	2027
Primary asbestos manufacturing	488	445	494	510	491	445	367	278	187	114	60
Secondary manufacturing	1,148	507	610	659	674	649	584	489	367	252	149
Insulation work	193	612	705	742	723	652	578	392	279	173	94
Shipbuilding and repair	6,086	2,493	2,710	2,451	1,076	1,659	1,256	919	628	401	219
Construction trades	7,505	2,143	2,593	3,004	3,308	3,390	3,191	2,697	1,996	1,243	669
Railroad engine repair	289	167	147	130	91	54	28	10	2	0	0
Utility services	628	267	299	312	310	290	254	207	152	102	59
Stationary engineers and firemen	3,113	721	816	865	875	819	728	602	449	304	179
Chemical plant & refinery maintenance	1,393	404	457	432	472	437	375	301	217	142	82
Automobile maintenance	6,416	384	470	524	578	586	576	538	458	346	222
Marine engine room personnel	268	63	64	60	55	46	38	27	19	12	6
Totals	27,527	8,206	9,365	9,739	9,653	9,027	7,975	6,460	4,754	3,089	1,739

[a] 1940-1979. Of the 27,500,000, 21,000,000 are estimated to be alive in 1983.

Table 2

Estimated asbestos-related cancer mortality per 100,000 by number of years exposed and exposure level[a]

Asbestos fiber concentration (f/ml)	Cancer mortality /100,000 exposed			
	Lung	Mesothelioma	Gastro-intestinal	Total
	1 year			
0.1	7.2	6.9	0.7	14.8
0.2	14.4	13.8	1.4	29.6
0.5	36.1	34.6	3.6	74.3
2.0	144	138	14.4	296.4
	20 years			
0.1	139	73	13.9	225.9
0.2	278	146	27.8	451.8
0.5	692	362	69.2	1123.2
2.0	2713	1408	271.3	4392.3
	45 years			
0.1	231	82	23.1	336.1
0.2	460	164	46.0	670.0
0.5	1143	407	114.3	1664.3
2.0	4416	1554	441.6	6411.6

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[a] Assumes exposure begins at age 25. Risks are calculated using U.S. male background rates for 1977.

Senator NICKLES. Thank you very much, Dr. Nicholson.

Senator Kennedy, we are most pleased that you have joined us. Do you have an opening statement?

Senator KENNEDY. Well, just very briefly, Mr. Chairman, because I know we have a full schedule of witnesses. I, first of all, want to express my appreciation to you for commencing these hearings and for the 3 additional days of hearings which you will chair, the attention that you have given to this issue, along with Senator Riegle, who I know has been enormously interested, very committed on this issue and was very strongly committed to the whole development of the OSHA legislation, which many years ago we thought would be the kind of legislation that might be able to deal with this problem. I am grateful to you for having it.

Not only are there millions of workers all across this country that are affected by it, there are thousands in my own State of Massachusetts that care very deeply about it. These are basically oversight hearings to try and determine and detect the nature of the problem, and I think it is extremely important that these hearings be held.

I am convinced that as a result of the course of these hearings that we are going to have, by the kind of record made, which will hopefully provide us with the kind of materials to help us deal with an extremely complicated and difficult issue.

I have a very brief statement, if I could, Mr. Chairman, just read it at this time.

Senator NICKLES. Certainly.

Senator KENNEDY. The asbestos problem has been called a litigation crisis which threatens to engulf our court system. I believe it is a public health tragedy which symbolizes our failure to protect American workers not only from asbestos, but from scores of other deadly workplace substances, as well.

We have known about the danger of asbestos for a very long time. Until very recently little was done to protect the workers and prevent the disease, and as a result, a generation of Americans has been needlessly exposed to asbestos fibers, and now thousands will die every year for the next 20 years, and perhaps millions more will become sick or disabled.

This committee has been trying to deal with the asbestos crisis since at least 1968. When we passed OSHA, we felt we had a real plan to solve it. For over a decade, business and industry have spent too much time trying to escape the blame and too little time living up to their responsibilities.

Today, while millions of Americans continue to be exposed to asbestos, industry continues to oppose effective protection for workers. Just last month an asbestos industry group persuaded a Federal court to throw out an emergency OSHA standard that would have substantially reduced workplace exposure limits and save workers' lives.

It is sad that only the prospect of great financial loss seems to spur a call for solutions. Many older workers now face asbestos sickness and death without the prospect of adequate medical care or compensation for their families.

Asbestos is unique only in the sense that it is already claiming its victims. Dozens of other dangerous cancer-causing chemicals are in widespread use today. It may be a generation before we will see the full consequences for today's workers. That is no excuse for refusing to protect them today.

These hearings provide an opportunity to conduct a thorough review of our system of workplace health and safety. First, we must carefully review our method for regulating toxic substance in the workplace, and I believe that system is too slow and cumbersome and must be improved.

Second, we must reexamine our method for compensating the victims of the occupational disease. State workers compensation is not designed to deal with the diseases caused by asbestos or toxic chemicals, and it is not doing the job today. I believe the failure of the workers compensation system is in large measure responsible for the tort litigation crisis which we are being urged to correct. Adequate compensation is the best way to reduce litigation.

The asbestos crisis did not have to happen, but it is with us. We must learn from it. We resolve that it will not happen again.

I am grateful to you, Mr. Chairman. I want to indicate to the witnesses I will look forward to reviewing their testimony. As the Chair and Senator Riegle know, we have pending before us the prospect of three amendments to the medicare system, which I have introduced and have been cosponsored, I believe, by Senator Riegle. We would be glad to include you as a cosponsor, too, Mr. Chairman, but I am working out with Senator Baker at the present time a sequence for the consideration of those. I will have to necessarily absent myself, but I am very grateful to you for permitting me to make these comments.

Senator NICKLES. Thank you very much, Senator Kennedy.

Dr. Nicholson, CBO used yours and Dr. Selikoff's figures to estimate the numbers shown on the accompanying chart. Do the CBO projections of your figures from 1985 to the year 2000 appear to be accurate?

Dr. NICHOLSON. Yes, they do.

Senator NICKLES. You have used the term "excess deaths in the chart." Would you define that?

Dr. NICHOLSON. Well, these would be deaths in addition to those expected in the population exposed. One can estimate the number of deaths from lung cancer, from gastrointestinal cancer in the general population using data available from the National Center for Health Statistics. Among asbestos-exposed groups, one finds that there are more deaths from these causes, as well as from asbestosis and mesothelioma, and thus, the number of cancers beyond those expected are the excess deaths on the chart.

In the case of asbestosis, it is that number that will suffer significant impairment. The number of deaths from asbestosis would add some to the death total, but it would not be a substantial number.

Senator NICKLES. You mentioned 232,000 as deaths, and in asbestosis, it mentions excess disabilities. So most of those do not result in death?

Dr. NICHOLSON. They would not result in death from asbestosis per se, but many of those that develop an asbestotic disability would die of one of the asbestos-related cancers. In severe asbestosis, the individual is literally suffocating from inability to get enough oxygen into his bloodstream. It occurs largely in those that have been heavily exposed over many years; among insulation workers, 7 percent of their deaths occur from that cause.

Similarly, in factory workers, asbestosis can be a very important cause of death, but it would not be an important factor in the deaths of individuals exposed at much lower concentrations or for much shorter periods of time, even though such exposures can lead to disability and to excess cancer. The dose-response relationship is not linear for death from asbestosis, whereas it would appear to be so for the malignancies.

Senator NICKLES. Where it is fatal with the malignancies, it is not necessarily fatal with the asbestosis, but it could be.

Dr. NICHOLSON. That is right.

Senator NICKLES. Would you care to define "excess disability"?

Dr. NICHOLSON. This would basically be shortness of breath. The individual is not able to do the work that he would normally be able to do because he cannot get enough oxygen to his bloodstream. The impairment can be measured by pulmonary functions tests. It has been shown that asbestos workers have a reduction in their forced vital capacity. Their usable lung volume is reduced. This is restrictive pulmonary disease. They may also have some obstructive pulmonary dysfunction. Largely though it is restrictive, often coupled with a reduction in diffusion that I mentioned earlier. This leads to significant disabilities among those so affected.

Senator NICKLES. Significant disabilities, meaning they would not be able to perform the same type of work they were performing. I am assuming more of a manual type labor.

Dr. NICHOLSON. That is correct.

Senator NICKLES. They could possibly do an administrative type of function?

Dr. NICHOLSON. They perhaps could sit at a desk or could have restricted work activities. You have a full spectrum of disability.

Senator NICKLES. Is that a progressively worsening situation?

Dr. NICHOLSON. Yes, it is. Often at the cessation of employment, an individual's respiratory function is quite normal. However, the asbestos fibers that were inhaled are still in his lung, and they continue to produce the fibrotic changes in that lung, scarring, that will ultimately lead to impaired lung function. In some cases it may take 20, 30, or more years. In some cases it would not progress very substantially.

Senator NICKLES. Does it get progressively worse, or does it sometimes arrest itself?

Dr. NICHOLSON. In some individuals the progression would be very slow or minimal. In others it can be very rapid. Again, there is a spectrum of responses.

Senator NICKLES. You state that 27.5 million individuals may have had some exposure to asbestos at work between 1940 and 1980. That is alarming. You also indicate of this number, 21 million were estimated to be alive in 1983.

Of these exposures, how many workers do you believe will develop an asbestos-related disease?

Dr. NICHOLSON. Overall, in terms of mortality, the estimate is that there will be 350,000 cancer deaths. I would estimate that there would be an additional 250,000 individuals who would have significant impairment from those exposures. There would also be about 10,000 asbestosis deaths.

Senator NICKLES. How many deaths are you are looking at?

Dr. NICHOLSON. I am sorry. The chart shows data to the year 2000. I have just given you data to the year 2030. The numbers on the chart would describe the situation of that group of 21 million that would be alive today over the next 16 years. So we are looking at——

Senator NICKLES. I am trying to see where you are estimating.

Dr. NICHOLSON. At about 150,000 deaths to the year 2000 and another 80,000 disabilities.

Senator NICKLES. This is for a combined 230,000 out of a potential field of exposure of 21 million.

Dr. NICHOLSON. That is correct.

Senator NICKLES. Should cigarette smoking be considered in compensating the lung cancer victim?

Dr. NICHOLSON. Cigarette smoking has been shown to produce lung cancer. What asbestos exposure does in combination with cigarette smoking or other agents in the environment is to multiply the underlying risks that the individual has for lung cancer in the absence of the asbestos for exposure.

Let's take an asbestos worker, heavily exposed for 25 years. If that asbestos worker is a nonsmoker, the 20 or 25 years insulation work will increase his risk of lung cancer by about five times. Fortunately, nonsmokers have a relatively low risk of lung cancer, so few cancers develop.

The cigarette smoking asbestos worker also has his risk multiplied five times. That is, asbestos acts equally on smokers and nonsmokers. It will multiply whatever is the underlying lung cancer risk. But the underlying risk of a cigarette smoker is 10 times greater than that of a nonsmoker. So when the smoker's risk is multiplied by five, you have a disaster. You have a risk 50 times that which someone would have if he did not smoke or work with asbestos.

Now, most of these individuals were unaware of the multiplying effects of the asbestos on their smoking risk at the time they took employment. Most were even unaware of the smoking risks. They were unaware perhaps until the late 1960's. The companies were unaware of it prior to the mid-1960's. No one was warned that this was a danger. There was no informed choice on the part of the worker to decide whether or not to smoke cigarettes or whether or not or this was taking a risk Therefore, I do not think that cigarette smoking, under those circumstances, should weigh against the individual. If he did not have the asbestos exposure, he would not have that multiplied risk, and I think that is the important issue.

Senator NICKLES. Can you determine what percentage of lung cancer is due to asbestos exposure and what percentage is due to cigarettes or smoking?

Dr. NICHOLSON. You can, on a statistical basis, estimate the contribution of one factor or the other to lung cancer in a group of individuals in which their smoking habits and asbestos exposure are known. In terms of the multiplicative effect in insulation workers, I have given you the data. You can reverse the process and look at the multiplying effects of the cigarette smoking as well.

Cigarette smoking certainly is a disastrous habit. It certainly is contributing enormously to the lung cancer toll that we have. In fact, the consequences to our population are far, far greater from cigarette smoking; even in most of the asbestos-exposed workers, the effect of cigarette smoking is greater. Thus, a very good argument could be made that tobacco companies should be brought into the compensation system. But, it still does not absolve the asbestos producers from their responsibility in their death.

Senator NICKLES. You mentioned in your statement that a large percentage of these individuals had very short exposure times of 2, 3, or 4 months; however, you still feel like they were susceptible to obtaining an asbestos-related disease.

Dr. NICHOLSON. There is a probability that a lung cancer that they would develop could be occupationally related, but it is a much lower probability.

Senator NICKLES. Is there a direct relationship between the years of exposure and the likelihood of one of these asbestos-related diseases?

Dr. NICHOLSON. Largely, there is. For a given intensity of exposure, the longer the employment, the greater the risk. In fact, it would be proportional to the years of employment and the intensity of the exposure.

So if you have very high concentrations of asbestos over long times, you have the greatest risk, and one can just make a proportional estimate based upon the concentration and the number of years employed.

Senator NICKLES. Couldn't the same thing be said for lung cancer due to smoking?

Dr. NICHOLSON. Yes; again, there is proportionality to the number of cigarettes smoked and the duration of smoking, roughly speaking.

Senator NICKLES. Thank you.

Senator Riegle.

Senator RIEGLE. Just following along on that, I gather that that is across a population of individuals so that in a given case, you might have somebody who is more susceptible to developing cancer with a limited exposure; whereas, another person whose physical makeup is somewhat different, might be less susceptible.

I would like you to describe, as bluntly as you can, what happens to a person who develops the asbestos-related type disease in terms of the ultimate consequences. What actually happens here?

Dr. NICHOLSON. Well, if you are speaking of someone that now has a fairly heavy exposure——

Senator RIEGLE. That is what I am talking about.

Dr. NICHOLSON [continuing]. And begins to develop asbestosis, he will soon be unable to work and will simply putter around the house for a while. As the disease progresses, he will not be able to walk up stairs, or if he can, he will walk up stairs slowly backwards, backwards because then he can sit down on the stairs part way up to catch his breath for a few minutes before he continues.

Senator RIEGLE. Now, what is taking place inside that is causing this?

Dr. NICHOLSON. Within his lungs fibers that would have been inhaled over past years are producing scars, just like those that you get from cuts on your hand, but these scars are on the lung membranes that normally would allow oxygen to pass from the alvioli into the blood stream. The scarring reduces oxygen diffusion and prevents the necessary oxygen from being carried to bpdy tissues. So, severe shortness of breath is the dominant symptom in this state of asbestosis.

Now, with such an asbestos exposure the individual is also susceptible to a cancer and may develop cancer before he dies of the nonmalignant asbestosis. There the development of the disease follows as it would in the absence of exposure to asbestos. For lung cancer the prognosis is very grim. Only 5 to 10 percent of individuals are able to live 5 years after diagnosis. In the case of mesothelioma, the mortality is even greater.

We do not at this time have an effective means of treatment of mesothelioma. Surgery, chemotherapy or any other medical intervention do little more than prolong life for 2 or 3 months, and the life that is being prolonged is not a very pleasant one.

Senator RIEGLE. Well, I want to go right through to the end. So the person who has asbestosis finds that it becomes more and more difficult to breathe. You say when they go up stairs, they have to go up backward because then they can sit down periodically on a step to get their breath.

Describe the further progressive nature of the disease.

Dr. NICHOLSON. Finally he may then only be able to sustain life by having oxygen available to him.

Senator NICKLES. He would be bedridden?

Dr. NICHOLSON. He would literally be bedridden.

Senator NICKLES. What finally happens to the lungs?

Dr. NICHOLSON. What will finally happen is he will get a respiratory infection, and that will be the terminal event. This would be a pulmonary infection that you or I would have no problem with whatsoever, but in an individual with such a restricted lung function and no reserve capacity, it is a life-threatening situation, and one that must be treated as a medical emergency. Often it is not, or the individual is not able to be sustained through that emergency, and he will die of pneumonia or influenza or some other respiratory infection.

Senator RIEGLE. In effect, does that happen in all of the cases or is there finally in some cases a situation where people leterally cannot get enough air to be able to breathe properly?

Dr. NICHOLSON. Another feature occurs. One can go into heart failure. Because of the scarring in the lung, the right side of the heart which pumps blood through that organ becomes stressed and will fail, a condition called corpulmorale. So one can, in essence, die of heart failure. I should mention I am not a clinician. So I am just describing events that I am aware of.

Senator RIEGLE. I understand.

Dr. NICHOLSON. Certainly people could hang on for a very long time under these circumstances, but it is not a very pleasant existence.

Senator RIEGLE. It sounds like it is a horrible way to die.

Dr. NICHOLSON. It certainly is.

Senator RIEGLE. And it sounds like it would be very difficult for the families involved, too, to see this occurring and not knowing when the person whose lung function is disintegrating, in effect, might be struck by this particular disease or cancer which is assisted by this process. I would think that the nervous strain for the family in a situation like this also has to be very intense and horrible.

Dr. **Nicholson**. It is, indeed, and I have interviewed people in families, where such individuals are present, and it is not a very pleasant visit at all.

Senator **Riegle**. Now, how expensive is it today to get the medical treatment and assistance that one would need in this situation? I would assume at some point when the breathing becomes labored enough, that a person has to be hospitalized to get the kind of oxygen treatment and the other kind of intensive medical treatment that would be necessary. Can you give us any sense of the cost when the medical bills start to accumulate?

Dr. **Nicholson**. No; I am sorry. I do not know. I have no information on medical costs.

Senator **Riegle**. Would it be your assumption that this is a very expensive course of treatment?

Dr. **Nicholson**. Certainly much of the disease is very expensive. The treatment of cancer is very expensive. The respiratory maintenance can be very expensive.

Senator **Riegle**. So we are talking about two things. We are talking about not only a horrible disease and the consequences for both the individual and for the family involved, but also enormously expensive treatment.

Dr. **Nicholson**. That is right. Dr. Selikoff, who has been following insulation workers for 20 years, writes to the survivors of those deceased in order to get information on medicial treatment the individual might have head. The letter is sent to the last home. At times the answer has come back from a trailer park or boarding house.

Senator **Riegle**. A trailer park or a boarding house?

Dr. **Nicholson**. Yes.

Senator **Riegle**. Because these people have exhausted their money, and they have reduced their standard of living in order to try to get by while they are paying these increasing medical bills?

Dr. **Nicholson**. That is right.

Senator **Riegle**. Well, that is a very sad commentary. It seems to me what we are learning from this very powerful example is the widespread effect that asbestos-related disease has on a large number of people. This kind of affliction has hit literally thousands upon thousands upon thousands of individuals and families, and the dollar cost to them and to the society, I would think, has to be measured in the tens of millions, if not even in the hundreds of millions, of dollars if you are to deal with it.

So finding some way early on to identify these hazards to try to prevent them from taking place, and to prevent all of this stream of misery that follows is essential. We must also develop a foolproof system so that a person who is unwittingly diseased in this fashion can, at the end of a work career or after the exposure period, receive compensation that meets these medical costs and prevents him and his family from having to move into house trailers, boarding houses, welfare shelters, or whatever may be required. It seems to me that this is the kind of national problem that requires a national response.

It is proper that we are meeting and discussing it. If we finish without coming up with a way of responding to the problem that really meets the full dimension of the problem, however, we will have failed in what our assignment really is here.

Dr. NICHOLSON. You are absolutely right.

I might just mention one issue that you had raised earlier, that of other agents. We have much to do in the identification of other carcinogens. At this time there are only about 18 recognized human carcinogens and maybe another two dozen accepted as human carcinogens on the basis of amimal data for which human exposures are significant. Of those 18, roughly half of them were identified in work circumstances where the relative risk was about 100 times that which was expected. In the other half, the relative risk was about tenfold.

That is a very unusual distribution. We have yet to identify and take action on literally hundreds of carcinogens that would be present in the workplace with lesser risks, but still substantial ones for the individuals so exposed. So there is much to be done in that field as well.

Senator RIEGLE. Well, anything you have along that line or that Dr. Selikoff has that would help us start to do the detective work on these other things would be useful for us to have. Let us evaluate it and see what we can come up with here.

Dr. NICHOLSON. Yes; I will be glad to send some of the material to you.

Senator RIEGLE. You know, our brain power ought to be put to work to stop this problem now before it grows to the dimensions that we are seeing in the asbestos-related situation. We presumably have other kinds of asbestos-type situations occurring now that we do not know about, and that we have not identified, and the sooner we identify them and stop them, the better for everybody.

I have other questions for the record that I am going to ask that you respond to, as well, and I will not take any more time, Mr. Chairman.

Senator NICKLES. Thank you, Senator Riegle.

Dr. Nicholson, just a quick followup question: Reviewing your numbers, you mentioned out of the potential persons who have been exposed, 21 million people who have had, I guess, a sufficient level of exposure, you estimate to the year 2040 or 2030, I think, 350,000 deaths and 250,000 significant disabilities. That is what, about 3 percent of that figure, if my figures are correct? About 3 percent of those persons who you classify as significant exposure would suffer one or the other?

Dr. NICHOLSON. That is roughly right.

Senator NICKLES. I realize there is a very significant threat of disease and problems for those who have had this disease. Is there a threat for someone who would do weekend installation in his home when he is trying to save on energy costs, and goes down to the hardware store and buys several of these big rolls of asbestos insulation?

Dr. NICHOLSON. Yes, but the threat is a much lower one. As I mentioned earlier, our best information is that it is proportion to the duration of exposure. So 1 day's work, even if the intensity is high, creates a much, much lower risk than 20 years of employment in a dusty factory. There is a small risk in home installation, but it is nowhere near that of someone in an employment circumstance.

Senator NICKLES. You will not have 2 or 3 percent for everyone who goes in and grabs home installation?

Dr. NICHOLSON. No, of course not. The 2 or 3 percent were for this very large occupationally exposed population. However, for the very heavily exposed, those that have been employed in factories or as insulators, fortunately a small minority of the 21 million, the percentage that are affected or much greater than 3 percent. Forty percent insulators will die of their asbestos exposure and an additional large percentage will be disabled or have some disability.

I am talking about 20 years of heavy exposure.

Senator NICKLES. What percentage was that?

Dr. NICHOLSON. Forty percent of long-term insulation workers can have their deaths directly related to their asbestos exposure. Of those insulators that are dying today, 1 in 5 dies of lung cancer, one in ten of gastro-intestinal cancer, nearly 1 in 10 of mesothelioma, and another 7 percent of asbestosis. So it is a very heavy toll at the high end of the exposure spectrum.

Senator NICKLES. Thank you very much, Dr. Nicholson. We appreciate your input.

Our next panelist is Dr. Paul Wheeler with the Department of Radiology and Radiological Science at Johns Hopkins Medical Institutions from Baltimore.

Dr. Wheeler, welcome.

STATEMENT OF PAUL S. WHEELER, M.D., DEPARTMENT OF RADIOLOGY AND RADIOLOGICAL SCIENCE, THE JOHNS HOPKINS MEDICAL INSTITUTIONS

Dr. WHEELER. Good afternoon, sir.

I do not believe you can buy asbestos insulation. You can buy asbestos brakes, but asbestos insulation I do not believe is on the market any more in this country.

I am a general radiologist from Johns Hopkins, an associate professor of radiology, and a long-term B reader. I consult for the State of Maryland, and also for the Social Security Administration.

Three years ago a Deputy Commissioner of Labor sent 100 x rays of coal miners to Johns Hopkins for interpretation. They were normal, and we were surprised to find that this was not a screening project. All had been processed and were ready to receive compensation for silicosis. We requested an investigation, which eventually uncovered a clear evidence of fraud in the black lung evaluation process.

We are now compelled to voice our concern over the rising number of poorly documented claims of asbestosis. In the last year we have seen six-figure claims and settlements on cases ranging from healed tuberculosis to simply smoker's emphysema.

This report urges adoption of precise, modern, diagnostic standards to replace the nonspecific criteria which presently can support large claims for asbestosis. I am sorry that it is not possible to show slides of some of the cases and problems which confront us.

Radiology is a graphic art, and 1 picture is worth 1,000 words, just as one pleural plaque in asbestosis is worth many thousands of dollars.

If you ever visit Hopkins, please accept this invitation to see our evidence for the new form that asbestosis takes and the problems which it poses radiologists.

Fear of asbestosis and asbestos-related cancers has caused a wave of litigation. The problem is compounded by two different conditions called asbestosis and a short statute of limitations which spurs the filing of suits. A fair compensation program gives funds to people with proven occupational disease and protects against false claims.

With asbestos, the process is badly distorted. Legal costs take two-thirds of the money spent on cases, mainly due to the complexity of suing multiple manufacturers. Nonspecific x-ray evidence is used for diagnosis instead of histology.

The issue of lung cancer in asbestos is clouded by the nearly universal smoking habit among industrial workers. Smoking is a known dose-related cause of cancer, but the failure to litigate the tobacco industry for its role in this tragically preventable disease contrasts sharply with the attention given asbestos, which by itself is a much weaker carcinogen.

Modern medical practice demands exact diagnosis followed by specific therapy. In asbestos claims, there is abrogation of basic diagnostic principles, which are as essential to good medical care as they are to fair compensation. Radiology is good for finding abnormalities, but is nonspecific.

Since asbestosis is only one of many lung diseases, claims must be supported by more than x rays and a past industrial exposure history.

The solution to the asbestos litigation wave requires precise diagnosis of claimed disease and elimination of the statute of limitations in cases of exposure. Otherwise frivolous suits will flood the courts and delay the valid claims.

Experience with the black lung compensation program provides a sobering example on a far smaller scale.

Finally, the tobacco industry should bear its share of the claims for lung cancers in asbestos workers. In the last 2 weeks in Hopkins, we have seen one woman, age 33, with a primary lung cancer treated. She was a smoker. She is youngest by 6 years of the lung cancers I have seen in women. Next year lung cancer in women will be outrank breast cancer. Indeed, it has come a long way.

There are many lung diseases. Pneumoconiosis is lung disease due to inhaled dust. Asbestosis is lung fibrosis due to inhaled asbestos. The diagnosis requires histology: The microscopic demonstration of lung fibrosis with imbedded fibers.

Routine radiology can detect lung disease with standardized techniques, and a cadre of B readers specially trained in the widely accepted International Labor Organization pneumoconiosis classification.

Limitations of routine radiology are nonspecificity and technical problems. X rays are specific for few diagnoses, including fractures and bullet wounds, but not specific for lung disease. For example, TB, sarcoid, and cancer metastases can look exactly like the nodules of black lung on an x ray. However, many more common diseases give lung scarring identical to asbestosis, including bronchiectasis, chronic aspiration pneumonia, sickle cell infarcts, and lymphatic spread of cancer.

Obesity is a major technical problem in causing image blurring scatter radiation and hypoinflated lungs. The radiologist must distinguish between lung scars and crowded blood vessels of similar size, often on a single x ray. The tendency is to fail-safe and overinterpret.

Pulmonary function studies measure degree of impairment and help distinguish between emphysema common in smokers and black lung and the restrictive scarring of asbestosis. They, too, are nonspecific because many diseases cause abnormal pulmonary function.

In summary, exact diagnosis of pneumoconiosis requires microscopic examination of tissues. Good quality x rays can detect nonspecific findings that are "compatible with pneumoconiosis." Few diseases perfectly simulate black lung, but many give patterns identical to asbestosis.

The Johns Hopkins department of radiology has provided a diagnostic service for pneumoconiosis beginning with the development of the B reader examination by Dr. Russell Morgan, formerly department chairman and dean of the Hopkins School of Medicine.

The service expanded to include asbestos-exposed workers from several corporations, the State of Maryland, the Social Security Administration, and the U.S. Coast Guard.

Baltimore is a city with heavy industry, including steel production, shipyards, and insulation firms.

Johns Hopkins Hospital has 900 beds, including 1 of the regional cancer centers. The autopsy and surgical pathology services provide valuable information on the incidence of proven cases of asbestosis and related tumors.

The hospital's pulmonary medicine division ran an early lung cancer detection project involving radiology. Ten thousand male smokers over the age of 45 were examined yearly for 7 years. Baltimore, being a blue collar city, it was an ideal opportunity to study a number of people exposed to a variety of agents, including asbestos.

Finally, the hospital's careful evaluated caseload provides a spectrum of conditions which continually proves the need for exact diagnosis in lung disease.

The medical literature on asbestos hazards is voluminous, but the following findings are salient.

Asbestos has been used in great quantities by industrialized nations for years.

Inhaled asbestos dust can cause lung fibrosis and benign pleural plaques, both called asbestosis. Epidemiologic studies have shown a relation to the development of mesotheliomas and increased rates of certain cancers, including cancers of the lung and larynx.

Virtually our entire population has been exposed to asbestos with ferruginous or asbestos bodies found commonly on autopsy surveys. The highest exposure is among workers in mining, insulation, construction, auto repair, and shipyards. The diagnosis of asbestosis requires histology because radiology is nonspecific, and although there are many claims of disease, there are few proven cases, even among the claims that are settled.

Two different conditions are called asbestosis. Pulmonary asbestosis is a rare form of lung fibrosis, judging from the 19 cases found at autopsy at Johns Hopkins since 1969. Most of those were incidental findings. It is felt to be due to high dust exposure and can progress in the absence of further exposure to restrictive lung disease and eventual pulmonary failure.

Benign fibrous pleural plaques, on the other hand, are also called asbestosis. They are asymptomatic deposits of collagen on the outer layer of pleura, common among shipyard and construction and insulation workers who generally have no detectable lung disease. In time they can calcify and become very visible on x rays.

Low doses of certain asbestos fibers are involved because plaques can be found in shipyard guards who are not directly working with products, and even in the wives of insulators. The fibers are light and spread readily by the shaking of clothes in the family laundry, and by the industry's traditional use of compressed air to clean up rather than brooms and vacuums.

Dozens of cases of pleural plaques have been found at autopsy and at surgery at Johns Hopkins since 1969.

Clinical evidence of the benign nature of even giant pleural plaques came from a detailed evaluation at Hopkins of a man who had been an insulator for 40 years at a major oil company. ACT scan of his chest showed extensive one centimeter thick plaques in the pleura over much of his chest wall, the diaphragm and the heart, but there was no detectable lung fibrosis.

Fortunately he had never smoked, and this gave us an opportunity to study his resting and exercise pulmonary function studies, which were absolutely normal. After 15 minutes on the treadmill, the 63 year old man complained of some tightness in his legs.

A pilot study from the Early Lung Cancer Detection Project showed people who develop lung cancer had positive correlation with asbestos, iron oxide and arsenic exposure, along with lung scarring, but not with pleural plaques.

How plaques develop is unknown. The theory that they result from fibers passing through the lungs to the pleura seems disproven by the observation that plaques are found only on the outer layer of pleura, not on the inner layer that covers the lung, generally in the absence of any detectable lung fibrosis.

Dr. Jerome Kleinerman, chief of pathology at New York's Mount Sinai Hospital, is running a definitive autopsy study on plaques designed to show their incidence and their relation to pulmonary asbestosis. This important project is now funded by the College of American Pathologists alone and could be speeded by a well-deserved Government grant. Johns Hopkins is one of the contributing hospitals, contributing autopsy cases to that study.

Although evidence shows pleural plaques are common and benign markers of low dose asbestos exposure, when a radiologist calls plaques asbestosis, it results in a claim as readily as the finding of lung fibrosis. Surprisingly, there are no statistics on the percentage of claims for plaques alone. We suspect that they are the cause of most suits, past and present, judging from the autopsy statistics. Nationwide, two-thirds of claims come from shipyard and insulation workers who commonly have plaques found on x ray.

Occupational medicine should diagnosis, treat, and prevent industrial-related disease. Compensation should pay for proven disability. In pneumoconiosis, both asbestosis and silicosis, nonspecific radiographic findings are given the status of histologic proof. Claims can be made by people with emphysema and lung and pleural scars from a host of other diseases.

Frequently one marginal quality chest film is the only evidence of disease in a claim involving large sums. This practice subverts the goals of modern medicine, which are precise diagnosis and therapy, and it fails to protect against false claims. In fact, it invites them, and as the courts flood, the payment of valid claims is delayed.

When a company pays compensation for scarring due to healed TB or sarcoid or other nonasbestos-related diseases, it carries a double stigma. It carries the added stigma of guilt for having been negligent to its worker.

The Black Lung Compensation Program shows clearly what happens when x rays replace histologic proof. Numerous claims from absolutely normal miners, age 30 to 50, were submitted, apparently in the expectation that the normal blood vessels would be mistaken for black lung nodules.

The mesothelioma is a rare tumor of pleura and peritoneum. Apparently low doses of asbestos exposure can cause them, but their rarity, considering the utiquity of asbestos in the environment, is and always has been an enigma.

In 1962, I performed the only autopsy on a case of mesothelioma at Western Reserve Institute of Pathology. There were 700 autopsies done that year. It was one of the most difficult diagnoses to establish and required our most senior pathologists to establish the diagnosis with certainty.

The reason is the tumors can be hard to distinguish from matastases, from cancers of the pancreas, bile and ovary, which are very common. Expert clinical and patbologic correlation is needed on these cases.

Insurance companies would naturally prefer to have a short statute of limitations, and this causes people with only pleural plagues to file claims. Some States correctly disallow the statute of limitations for serious diseases which may take decades to develop.

Claimants without histologic proof of asbestosis, but with very convincing x rays and restrictive pulmonary function studies could receive compensation, in our opinion, if they agree to provide proof at the time either of future chest surgery or after death with a mandatory autopsy. An insurance policy could protect the family from having to pay back in case the autopsy shows no evidence of asbestosis. Specially trained pathologists in regional centers could assure accurate and impartial diagnosis.

In summary, a tidal wave of asbestos claims threatens the judicial system, industry, insurance firms, and eventually the Government. The problem can be solved by distinguishing between pulmonary asbestosis and benign asbestos-related pleural plaques, requiring histologic proof in place of nonspecific x ray evidence and elimination of the statute of limitations.

These steps would protect workers and industry alike and assure a fair system of compensation, with money paid directly to people with proven disease and not for legal costs.

Thank you.

[The prepared statement of Dr. Wheeler follows:]

ASBESTOS-RELATED LITIGATIONS:
A SCIENTIFIC PERSPECTIVE AND SOLUTION

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INTRODUCTION:

Fear of asbestosis and asbestos related cancers has caused a wave of litigation which swamps the judicial system. The problems is compounded by semantics (two different conditions called "asbestosis"), faulty proof of claims, profuse media attention, and extremely weak evidence for increased risk from exposure to low doses of asbestos. Insurance companies favor a short statue of limitations (inappropriate for disease which may take decades to develop) and this has spurred the filing of suits.

A fair compensation process gives funds to people made ill by occupational exposures and protects against false claims. With asbestos the process has been badly distorted in three ways. About two-thirds of funds spent on litigation go to lawyers and the courts rather than to claimants. Non-specific radiologic evidence is used for diagnosis instead of histology. The issue of lung cancer and asbestos is clouded by a nearly universal smoking habit among industrial workers. Smoking is a known dose-related cause of cancer but the reluctance to litigate the tobacco industry for its role in this tragic disease contrasts sharply with the attention given asbestos which by itself is a much weaker carcinogen.

Modern medical practice depends on increasingly exact diagnosis followed by specific therapy. In asbestos claims,we see the result of abrogating diagnostic principles which are as essential to good medical care as they are to fair compensation. Radiology is excellent at localizing abnormalities but is non-specific. Since asbestosis is only one of many causes of lung disease, claims must be supported by more than x-rays and a past exposure history.

The solution to the wave of asbestos litigation involves a few basic changes: insistence on precise diagnosis of claimed disease and elimination of the statute of limitations in cases of asbestos exposure. Otherwise, lawsuits will increase in size and number and claims of people with disease will be delayed as the courts flood. Experience with the Black Lung compensation program provides a sobering example on a smaller scale. Finally, the tobacco industry should bear its share of blame for lung cancers in asbestos workers.

Background Information and Definitions:

There are many lung diseases. Pneumoconiosis is defined as lung disease due to inhaled dust. Asbestosis is lung fibrosis due to inhaled asbestos fibers and silicosis is lung fibrosis due to inhaled asbestos fibers and silicosis is lung fibrosis due to inhaled silica dust. The diagnosis depends on histology: the microscopic demonstration of lung fibrosis in association with imbedded dust or fibers.

Routine radiology is an available, relatively inexpensive, and sensitive way to detect lung disease. Other advantages are standardized techniques, a widely accepted (International Labor Organization-UICC) pneumoconiosis classification and a cadre of trained "B" readers.

Limitations of routine radiology include non-specificity, technical problems, and artifacts, and obesity which causes image-blurring scatter radiation and underinflated lungs with crowded blood vessels which can look like lung disease.

Routine x-rays are specific for a few diagnoses (including fractures and bullets) but non-specific for most lung diseases. Typically silicosis will cause rounded nodules in mid and upper lungs but TB, sarcoid, and metastatic cancer can give identical x-rays. Asbestosis begins as linear scars in the lower lungs but many more common diseases can give similar x-ray findings including bronchiectasis, chronic aspiration pneumonia, sickle cell infarcts, and even lymphatic spread of cancer.

Most coal miners are thin and the nodules of silicosis fairly readily seen on x-rays in the mid and upper lungs. In contrast, other industrial workers tend to be obese and muscular and evaluation of the lower lungs is impaired by overlying breast tissues. Diagnosis is further limited by the general use of a single frontal chest x-ray often of marginal quality and underinflation of lungs. The radiologist must distinguish lung scars from blood vessels of similar size.

Pulmonary function studies measure degree of impairment and help distinguish between obstructive disease common in smokers and silicosis and restrictive disease of interstitial fibrosis. They are expensive and non-specific. In silicosis the x-ray evidence of disease for compensation is below the point where pulmonary functions are abnormal and this precedent may be followed in asbestos suits.

In summary, x-rays offer cost-effective diagnostic evidence of findings "compatible with pneumoconiosis." Exact diagnosis of any pneumoconiosis requires microscopic examination of tissue. An x-ray can be a sensitive indicator of disease but it is non-specific. A few diseases can perfectly simulate silicosis but many can give patterns identical with asbestosis.

Johns Hopkins Hospital Role in Pneumoconiosis

The Johns Hopkins Department of Radiology has provided a consultative service for cases of suspected pneumoconiosis beginning with the development of the "B" reader examination by Dr. Russell H. Morgan, former departmental chairman and Dean of the Johns Hopkins School of Medicine. The diagnostic service initially involved coal miners but expanded to asbestos exposed workers from several corporations, the State of Maryland, Social Security Administration, and the Coast Guard. NIOSH regularly sends survey films and disputed cases.

Baltimore is a city with heavy industry including steel production and shipyards as well as construction, shipping, and insulation firms.

Johns Hopkins Hospital is a 900 bed University and general Hospital with critical and tertiary care facilities. The autopsy and surgical pathology services have been a valuable source of information on the incidence of proven cases of asbestosis and asbestos-related tumors.

The Hospital has a pulmonary medicine division which ran an Early Lung Cancer Detection Program for seven years. Ten thousand male smokers over age 45 were examined yearly. Because Baltimore is a blue collar city, it was an ideal opportunity to study a number of people exposed to a variety of agents including asbestos.

Finally, the Hospital's large number of carefully evaluated patients has provided a base for comparing suspected cases of pneumoconiosis, proving the need for exact diagnosis in lung disease. This was an excellent chance to interview patients with radiologic evidence of pneumoconiosis to learn details and mechanisms of exposure.

Asbestos-Related Disease, Facts, and Confusion:

The medical literature on asbestos and its problems is large but the following facts are salient:

1) Asbestos has been used in large quantities by industrialized nations for years.

2) Inhaled asbestos dust causes lung fibrosis and benign pleural plaques; epidemiologic studies have shown a relation of fibrosis to increased lung cancer rates and to the development of the mesothelioma, a rare cancer of pleura and peritoneum.

3) Virtually our entire population has been exposed to asbestos dust and there is considerable fear especially among those with occupational exposures, including workers in the asbestos mining, insulation, construction, auto repair shop, and shipyards. Isolated ferruginous bodies are common on autopsy surveys.

4) The fear has resulted in a wave of claims and lawsuits which saturate the courts and involve industry, insurance firms, and ultimately the government.

5) Exact diagnosis of asbestosis requires histologic proof because a great many diseases can give identical x-ray findings.

6) Although there are many claims of asbestosis, there are few proven cases even among the ones which have been settled. There is a surprising lack of statistics on what percentage of cases of asbestosis are actually lung fibrosis.

7) Two different conditions are called "asbestosis": asbestos-related lung fibrosis and benign pleural plaques. Pulmonary asbestosis is lung fibrosis with imbedded asbestos fibers or ferruginous bodies on microscopic examination. This is a relatively rare disease judging from the 19 cases found at autopsy at Johns Hopkins since 1969, many of them being incidental findings. It results from high exposure to dust and can progress without further exposure.

Inhaled asbestos can also cause benign fibrous pleural plaques which are asymptomatic and very common among shipyard, construction, and insulation workers. These pure collagen deposits involve only the outer pleural layer. How they form is unknown. They are acellular and in time can calcify. Asbestos is the most common cause of these plaques and low doses of certain fibers are involved because they can be found in shipyard guards and even wives of insulators. The fibers are light and spread widely because industry has traditionally used compressed air for clean-ups (rather than brooms and vacuums.) Dozens of cases of asbestos-related pleural plaques have been found at autopsy at Hopkins since 1969.

The Central Intent of Occupational Medicine and Compensation

The purpose of occupational medicine is to diagnose, treat and hopefully prevent industrial-related diseases. The purposes of any form of compensation is to pay for specific damage and disability. In the pneumoconioses, asbestosis and silicosis, we see the problems which result when non-specific radiologic findings are accorded a diagnostic status of histologic proof.

The goal of modern medicine has been to provide increasingly exact diagnoses for precise treatment. Typically radiology is used to detect and localize disease and provide a list of diagnoses. If needed, computed tomography gives more exact information. Biopsies, bacteriologic, and viral or serologic studies are needed for exact diagnosis. In pneumoconiosis the approach is opposite. A single chest film may be the only evidence of disease in a claim involving large sums.

Protection against false claims is vital to any industry. The need for exact diagnosis is clear in asbestos claims because so many diseases can given identical x-ray findings. Compensation should not be paid for lung scarring due to sarcoid, TB, and other non-asbestos-related disease.

More Facts about Asbestos-Related Plaques

Clinical evidence of the benign nature of even large pleural plaques came from a detailed evaluation of a man who had been an oil company insulator (and deinsulator) for 40 years. A detailed CT scan of his chest revealed extensive 1 cm thick plaques over much of his chest wall, diaphragm, and pericardium. There was no detectable lung fibrosis. Fortunately he never smoked and had normal resting and exercise pulmonary function studies. After 15 minutes on the treadmill, he complained of some tightness in the legs, perhaps appropriate for a 63 year old.

A pilot study from the Early Lung Cancer Detection Program showed the people who developed lung cancer had a positive correlation with asbestos, iron oxide, and arsenic exposure and with lung scarring but not with pleural plaques.

Dr. Jerome Kleinerman, chief of Pathology at Mount Sinai Hospital, is running the definitive autopsy study designed to show the incidence of pleural plaques. Hopkins is one of the contributing centers.

Although present evidence shows pleural plaques are a common marker of past, relatively low dose exposure to asbestos dust, when a radiologist calls a plaque "asbestosis" it results in a claim just as readily as the finding of lung fibrosis. We suspect this is a major reason for the large number of present claims. Although there are no statistics on just what percent of claims are for plaques alone, nationwide two-thirds are from shipyard and insulation workers. These are known to have plaques commonly.

Two analogies are apparent in asbestos litigation:

1) Compensation for lung fibrosis not proven to be asbestosis is like being jailed for looking like a criminal.

2) Compensation for pleural plaques alone is like being jailed for having the same name as a criminal.

The Mesothelioma Problem

The mesothelioma is a rare tumor of pleura and peritoneum. Apparently even low exposure doses of asbestos can cause it but its rarity considering the ubiquity of asbestos is odd. The tumor can be hard to distinguish from metastases from cancers of pancreas, bowel, and ovary. The majority of mesotheliomas, for example, at Johns Hopkins Hospital are in women with known metastatic ovarian cancer.

Past Experience on Claims in Black Lung

Experience with Black Lung compensation has shown two discouraging problems resulting from the use of x-rays in place of histologic proof: frivolous claims supported by poorly trained physicians and increasing numbers of claims from absolutely normal miners aged 30-50. These in turn effectively delay the processing of valid claims.

The Statute of Limitations

Insurance companies want a short statute of limitations and this causes some people with only pleural plaques to file claims to avoid being caught. Some states rightly do not allow the statute of limitations to be invoked because the serious diseases may take 20 or more years to develop.

Compensation Without Absolute Proof

Claimants without histologic evidence of asbestosis but with convincing x-rays and abnormal pulmonary function studies could be granted compensation if they agree to provide the proof at time of future chest surgery or after death with a mandatory autopsy. An insurance policy could protect the family from having to pay back in case the autopsy shows no asbestosis.

SUMMARY

The present tidal wave of asbestos claims is threatening the judicial system, industry, and eventually the United States government. The problem would be solved by 1) distinguishing between lung asbestosis and benign asbestos-related plaques, 2) a requirement for histologic proof of asbestosis rather than non-specific x-ray evidence and 3) elimination of the statute of limitations. These steps would protect workers and industry and would be the base for a fair system of compensation in which the money paid by industry and government would go to the people with proven disease and not into paying legal and judicial costs.

Senator NICKLES. Thank you very much, Dr. Wheeler.

Could you define what you mean when you say histologic proof rather than radiological means?

Dr. WHEELER. Yes. The exact diagnosis of any pneumoconiosis requires a piece of lung tissue to be examined under a microscope. This means a thin section, proper stains, and a careful evaluation under a microscope. What they would be looking for would be not only any asbestos fibers in combination with fiberous tissue, but also asbestos bodies, particularly among the workers who had had an exposure 20 to 30 years ago.

Senator NICKLES. To find out whether there was a plaque or to find out whether there was a cancerous plaque?

Dr. WHEELER. No, this is just to identify asbestosis. The pleural plaques themselves are unique. They are acellular. They are just exactly like a callus on the skin, except they happen to be on the pleura. How they form, no one knows. There are a number of interesting theories.

One theory that I have mentioned is that the fibers pass through the lungs, but we have seen cases in autopsies at Hopkins that have no asbestosis in the lungs and they have had nice plaques.

Senator NICKLES. Are you saying that should be done for pneumoconiosis as well?

Dr. WHEELER. What I am saying is that without exact diagnosis, we will see a continuing wave of claims for people who have scars, who have pleural thickening from a wide variety of conditions.

Senator NICKLES. You mentioned at the outset of your statement that you are reviewing 100 claims for pneumoconiosis. What was your finding?

Dr. **Wheeler**. Yes. A group of 100 cases were sent to us in a perfectly routine fashion by Mr. Wallace Robinson, who is a Deputy Commissioner of Labor. This was 3 years ago. He was interested in what our interpretations were because he learned from some of the radiologists working for the Department that the cases did not have pneumoconiosis, and our findings were that they did not have pneumoconiosis.

But other readers, B readers around the country, had read them as having pneumoconiosis in very minimal degrees, and this has set up the claims.

Senator **Nickles**. Could you explain for the record what you mean by B readers?

Dr. **Wheeler**. B readers are people who have taken a course given by the American College of Radiology and then have taken a detailed test designed to evaluate their ability to recognize coal workers pneumoconiosis. Now this has been expanded to cover asbestosis as well.

Senator **Nickles**. To make sure that I understand you precisely, are you saying that it is impossible to tell by x ray alone whether or not a person has asbestosis?

Dr. **Wheeler**. Absolutely impossible. I was going to bring slides today to show cases of individuals who look exactly as if they have asbestosis, except that when they are examined histologically, they are found to have usual interstitial pneumonitis, chronic aspiration pneumonia, a variety of other conditions.

We had one x ray of a man who is a well beloved educator in Baltimore, who has a lung cancer and diffuse lung fibrosis in the lower lung zone, but who fortunately has only been exposed to Senators, Presidents and leaders of foreign nations.

Senator **Nickles**. Would it have been determined through his x rays that he had asbestosis?

Dr. **Wheeler**. He has an x ray which, in the right hands, would be worth probably half a million dollars, and as I left his room last week after doing an industrial exposure history on him, much to my enjoyment, he was thinking back as to whether perhaps he had worked around some places that might have had some asbestos in the roof.

Senator **Nickles**. How is it possible to determine if someone does have asbestos-related disease?

Dr. **Wheeler**. The exact diagnosis is done with histology, most certainly with an autopsy, oftentimes with a lung resection for a lung cancer where you can identify the asbestos bodies in the adjacent lung, and in the nearby lung that is not involved with cancer.

Senator **Nickles**. We are not that interested in autopsies right now. We are trying to be more preventive. How difficult is that?

Dr. **Wheeler**. To do a lung biopsy is a fairly routine procedure. As I mentioned, for somebody who is too ill to have a lung biopsy, I can see that they could get compensation provided they have a restrictive lung disease and x ray evidence and good industrial exposure history, but there should be proof some time down the line if they are to receive compensations, which in many instances can range up to $100,000, $200,000 and more.

Senator **Nickles**. When you mention lung biopsy, can that be done in a manner without opening up the chest cavity?

Dr. **Wheeler**. No, the easiest way would be to do a small, limited thoraclotemy and a wedge biopsy of just the superficial portion of lung that would have documented lung fibrosis in it on the basis of an x ray.

Senator **Nickles**. Is that very expensive and physically strenuous?

Dr. **Wheeler**. It is not strenuous physically. The way medicine is rigged now, any hospitalization can be expected to cost several thousand dollars, which in turn is considerably less than some of the claims that we are seeing settled now.

Senator **Nickles**. I am concerned because there are thousands of claims pending. There are probably thousands more that will be pending.

Dr. **Wheeler**. Yes.

Senator **Nickles**. Earlier you heard statements that the potential exposure is in the millions. Many people are wondering whether they might have this problem and have a legitimate concern. How do they determine whether or not they have asbestos-related occupational disease?

Dr. **Wheeler**. The x ray would be very helpful, pulmonary function studies, an x ray showing lung fibrosis, pulmonary function studies showing restrictive disease, which would be an indication of the group that would be biopsied. That group would then be biopsied for diagnostic purposes.

I am sorry that Senator Kennedy left. Last night I talked for half an hour to the chief of pathology at Mass General. His experience is the same that we have had at Hopkins.

Assuming that perhaps not all industrial workers were dying at Hopkins, I have contacted each of the heads of pathology, at our coroner's office, the University of Maryland, Baltimore City, and several of the major community hospitals in the Baltimore area. They are not seeing asbestosis at autopsy.

Senator **Nickles**. Can mesothelioma result from other than exposure to asbestos?

Dr. **Wheeler**. I do not know what causes mesothelioma. Right now one of the best pieces of evidence is that mesotheliomas in low dose can be caused by asbestos, but I am sure that when the facts are all known on any of these tumors, we are going to find that there are multiple factors.

Senator **Nickles**. You mean most of them are multiple factors?

Dr. **Wheeler**. I would not be surprised.

We know, for example, with lung cancer that cigarette smoking is the prime mover. When they set up the early lung cancer detection project at Hopkins, they only accepted smokers because that is where they knew they would be able to get enough people to study, and over a period of 7 years we have picked up 230 cases, and those we studied meticulously with regard to their past industrial exposures.

Some of them were very interesting people. We have had, for example, in the Early Lung Cancer Detection Program a surgeon who has beautiful asbestos-related pleural plaques. It turned out that his wife died 30 years ago, and he took up high powered racecar driving and oversaw all of the brake work and clutch work on his car over a period of 12 years. He picked up an excellent set of pleural plaques, no lung fibrosis, just pleural plaques.

Senator NICKLES. Dr. Wheeler, we thank you very much for your statement. I have one additional question. You have heard the figures and the number of victims. There are a couple of different studies with a large contrast in the number of persons who would have a related death or serious disability.

Do you feel strongly in favor of either the lower set of figures or the higher set of figures, or have any comments on that?

Dr. WHEELER. I have no comments. I did take 2 years of Greek in high school not far from where Senator Kennedy lived, and there was a Delphic oracle who paid off one time, but most predictions have to be checked on a regular basis. We check our incidences of tumors and asbestosis on a regular basis with our autopsy service, and that is what is believable. We are not seeing the wave yet. It may come 20 years from now.

Senator NICKLES. Thank you very much, Dr. Wheeler.

Dr. WHEELER. Thank you.

Senator NICKLES. Our next panelist is Dr. Robert Jones, representing the American Lung Association from New Orleans.

STATEMENT OF ROBERT N. JONES, M.D., AMERICAN LUNG ASSOCIATION AND AMERICAN THORACIC SOCIETY

Dr. JONES. Mr. Chairman, I would be glad to keep my remarks to fewer than 10 minutes.

I am an associate professor of medicine at Tulane University and am here representing the American Lung Association and their medical arm, the American Thoracic Society.

You have in the record a transcript of my testimony, and I will not read that verbatim but simply summarize a few things from it.

First, the association makes the point, which is, I am sure, familiar by now, and a little distressing, that the best way to deal with these problems is to prevent them in the first place; that we must all think: Would that we had had the knowledge and the foresight and the determination in decades past to obviate the exposure and, therefore, reduce the risk to workers, and perhaps we would not have anything to deal with.

Most of the medical research and most of my own research as a medical scientist is directed toward prevention, not just of asbestos-related conditions, but various other lung diseases, so that there are a few of us in the business who can claim to be experts in disability compensation, but we have been urged to express some opinion on the approach to compensation.

Now, our first statement with respect to compensation is that perhaps disease-specific compensation is not the optimal approach, but if it is to be used, it should be a medical approach, and the medical issues that are central to this are the issues of diagnosis, namely, what ails an individual; of causation, what caused him to be ill; and finally, of impairment, how does the illness impact his total functioning as an individual. Is it, as Dr. Wheeler says, a pleural plaque, which implies really no distinguishable diminution in an individual's health or his longevity, or is it advanced asbestosis, such as described by Dr. Nicholson, where the individual fights for breath to the end of his days? This is a matter of impairment which can be quite independent of diagnosis and causation because while Dr. Nicholson graphically described advanced and significant asbestosis for the committee, as it exists today the majority of cases are substantially milder than that, and I think from Dr. Nicholson's statement that about 7 percent of the insulation workers' death certificates collected by Dr. Selikoff showed death due to asbestosis, you may safely infer that most cases of asbestosis are not fatal, or at least are not sufficiently large influences on death to be regarded as so by treating physicians.

That accords with my own experience. The asbestosis being diagnosed today is by and large mild, and in an older individual one can project with reasonable confidence that the individual, though he will have asbestosis to the end of his days, will not necessarily suffer diminution in function due to it.

There are many others for whom, of course, this cannot be said, some who have significant limitation of their breathing capacities at diagnosis; others who will move into that because of progression of the scarring condition.

It is easy enough to count cancers, and the estimates given here of excess cancer deaths, excess mesothelioma deaths are something to consider with respect to the total burden of asbestos in these diseases, but considering these estimates, both of which I am familiar with, and with regard to the questions that you have put to previous witnesses, I would suggest that the total burden of asbestos-related disease should not dissuade you from taking steps to rectify what is presented on that other chart, namely, the fact that most of the available funds for compensation are going to overhead on compensation system, whether it be a tort system, workers comp system, insurance claims or what have you. I think that is an accurate portrayal of the situation, namely, that the victims get only a minority of the available resources.

The main arguing point for a medical decision, after which questions of the available funds and their allocation could be made, is that for a relatively small cost, one can identify the victims. Then we can talk about what should be done for the victims.

It is very difficult to talk about victims either from projections or from the results of the end of the litigation system. Medical panels could be set up that, composed of medical and health specialists of proven expertise and probity, could determine with a very, very high degree of certainty who, in fact, was a victim of asbestos-related disease, and what the impact was on his or her health.

If that is done at the outset, then the huge front-end cost faced by people who will compensate the victims ultimately will be obviated, and most of the available resources for compensation can go to the victims themselves.

That is the recommendation, and I want to express a very strong disagreement with the opinions, views given by Dr. Wheeler concerning the necessity of cutting into someone's chest and removing the lung or part thereof to diagnosis asbestosis. The fact is that in someone with a substantial occupational exposure to asbestos, the prior probability of a nonspecific radiographic pattern, in fact, representing asbestosis is so high that the mere consideration that one disease can look like another becomes insignificant, so that for now and the foreseeable future, in considering the number of persons who may be affected and the number for whom a definitive opinion will have to be given, it is absurd to postulate that the only way we can know who has asbestosis is to open his or her chest and examine lung tissue with a microscope.

That is the last of the points that I wish to make, and I would like to make available the remainder of the time allotted for questions.

[The prepared statement of Dr. Jones follows:]

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Testimony of

Robert N. Jones, M.D.
on behalf of

American Lung Association/American Thoracic Society

Public Responsibility in Asbestos-Related Diseases

before the

Subcommittee on Labor
of the
Committee on Labor and Human Resources

April 24, 1984

Statement of Robert N. Jones, M.D.

Mr. and members of the Subcommittee:

My name is Robert N. Jones and I am Associate Professor of Medicine, Department of Medicine, Tulane University School of Medicine and a member of the Pulmonary Diseases Section, Tulane Medical Center, New Orleans, Louisana. I participate in an inter-disciplinary unit engaged in the investigation of occupational lung disease. My current research deals iwth a wide spectrum of mineral dust diseases including asbestosis and silicosis; occupational asthma including pulmonary reactions to isocyanates and cotton dust; roentgenography of pneumoconioses; characterization of functional abnormalities in occupational lung disease; and lung responses to acute and chronic gas exposure.

With this background and interest, I am pleased to have an opportunity to provide these comments on the important question of compensating workers whose health has been effected by exposure to asbestos dust. I appear before this Subcommittee on behalf of the American Lung Association and its medical section, the American Thoracic Society, and as an independent biomedical investigator, physician and academician.

The American Thoracic Society and American Lung Association are pleased to have this opportunity to provide unput in the deliberations of this subcommittee concerning one of the major occupational health issues faced by our society.

We represent a professional society composed of chest physicians and biomedical scientists who investigate the causes of and work toward the prevention of lung diseases, as well as public volunteers committed to reducing the burden of lung disease in communities around the country.

At the outset, we would like to emphasize our conviction that, as with many other occupationally induced disorders, the asbestos-associated diseases are best dealt with by prevention through control of exposures to airborne concentrations of asbestos dust. Monetary awards can never compensate individuals for loss of health, or their relatives for loss of life, nor can any compensation scheme provide the adequate disincentive for industry which would lead to prevention of these conditions; this is due in large part to the long latency period between relevant exposure and clinical manifestations of these diseases. Recognizing, however, that past exposures have produced these conditions, we are committed to the provision of just resolution of claims by injured workers. We have testified previously that it is our belief that disease-specific approaches to federal compensation legislation are not optimal in reaching the objective of equitable and timely awards for all workers who develop diseases as a consequence of their employment. The inadequacies of the black lung legislation have received considerable attention and have been the subject of periodic controversy, often focusing on questions of cost effectiveness and equity. Thus we regret the extension of a fragmentary approach to the overall burden of occupationally-induced lung disease implicit in the passage of further legislation dealing with the conditions caused by exposure to one specific material. Nevertheless, we recognize that there may well be overwhelming public and economic pressure making it necessary to consider seriously legislation dealing specifically with the asbestos associated diseases. Therefore, in spite of our reservations, we are anxious to provide our views on how this problem might be approached.

Much has been written and said recently concerning the inadequacy of the present system in meeting the needs of individuals who have developed asbestos-associated diseases. We are in full agreement with this assessment. In this context, tort litigation has been shown to be inequitable, costly, and markedly unjust in the distribution of resources, a high proportion of awards going to individuals in whom evidence of disease cannot be demonstrated. Indeed one of the main deficiencies in this approach is that it distorts medical evidence, calling, for instance, for "proof" when in fact medical diagnosis is more often hypothesis, i.e., the best available explanation given the facts about a case . Other deficiencies are the failure to rely on objective medical evidence in individual cases, as in mass settlements; and the fact that in the assessment of individual cases medical experts may be chosen not for their expertise and objectivity, but because their testimony will support one side or the other. Given the nature of medical diagnosis, the facts about a case are frequently open to more than one interpretation. We are also mindful of the projections of the future burden of such litigation affecting all segments of our society. Similarly, we feel that the State compensation systems have often dealt poorly with asbestos and other workplace-associated diseases, and we have testified previously in regard to our view that a uniform federal system of occupational lung disease compensation should be developed. We have reviewed, with disappointment and considerable reservation, the draft bills that have been proposed, since it is our opinion that they have not dealt adequately with medical criteria for the conditions to be compensated.

Our testimony on an approach to the compensation of asbestos-associated diseases is predicated on the belief that public policy in this area should be based on scientific information. The known asbestos-associated diseases have all been shown to be dose-related, and we are persuaded by the evidence that there are differences in biological activity of asbestos related to fiber type and process. While this is not the appropriate forum for a comprehensive discussion of these or other related scientific issues, it seems reasonable, however, to suggest that the scientific data base can and should be used in the decision-making process, as the means of assessing the likelihood that the disease is due to exposure, particularly for conditions which also occur in the general population in the absence of asbestos exposure. While we readily recognize, however, that many of the decisions made in the clinical setting concerning individual cases lack precision, informed medical opinions most often lead to reasonable conclusions. So it is with many clinical decisions.

The following, in our view, are the necessary elements of a more equitable and workable system of compensating the injured worker who has been exposed to asbestos. In the individual case, the major medical issues to be decided are diagnosis, causation, and impairment. The process of reaching a diagnosis depends upon sound medical practice irrespective of the underlying cause of disease. Determining the most likely cause will usually depend on assessing the levels of exposure to known causative agents; this will be based on epidemiologic studies of occupationally exposed populations. The assessment of impairment will depend primarily on evaluation of disturbance in lung function. Ultimately, guidelines must be established to facilitate this decision-making process, and these must be the subject of continuing review in light of emerging scientific evidence. We strongly suggest that these guidelines not be written into the law because of the dynamic nature of scientific knowledge. The legal system must accept the uncertainties of diagnosis, which invariably depends upon assessment of medical probabilities.

The structure of a workable system should first include a national panel of experts to develop, and periodically modify, guidelines and criteria for the adjudication of claims for asbestos-associated diseases. Secondly, there should be regional panels, which would, of course, include health professionals knowledgeable in occupational lung diseases, and which would be responsible for the case-by-case determinations. Finally, a mechanism must be developed to make possible an appeal of the medical decisions rendered by the regional panel.

While the selection of both the national and regional panels, and the development of an appeals system, should be dealt with in the legislation, the details of these aspects are beyond the scope of our testimony, although a few brief comments seem appropriate. The national panel of experts should consist of highly experienced and respected members of the biomedical community. They should be selected from outside the government, and be maximally immune to short-term political influences. Similar considerations should determine the selection of the regional compensation panels.

Recognizing the importance of the guidelines, which are the responsibility of the national expert panel, we have appended to this statement an outline of what we consider to be a reasonable set of guidelines concerning the asbestos-associated diseases based on present knowledge.

All of the diseases which have resulted from asbestos exposure in the workplace have serious consequences to health, and may impair function and reduce longevity with their implicit personal tragedy. For the individuals at risk because of past exposure to asbestos dust, public responsibility is to insure that those who are injured receive the necessary support and assistance. This has not always been the case. The blame for this must be shared by elements of the legal and medical system, as well as segments of management and labor. The system outlined in this testimony attempts to maximize rationality and equity. We have every expectation that the Congress will respond appropriately to this difficult challenge.

PROPOSED GUIDELINES FOR CASE EVALUATION
BASED ON ASSESSMENT OF EVIDENCE AVAILABLE MARCH, 1983

The case evaluation process involves establishing the presence of disease (diagnosis), its cause, and the extent of its functional effect on the individual (impairment).

I. Diagnosis and Determination of Cause

A. Asbestosis

Asbestosis is a pneumoconiosis defined as diffuse fibrosis of the lungs caused by asbestos exposure. Its features include rales (crackles), breathlessness, finger clubbing, lung function abnormalities (usually reduced volumes and impaired gas exchange), radiographic changes (irregular and linear opacities), and histopathologic demonstration of fibrosis with tissue fiber identification. The first four of these are non-specific; changes on the x-ray and pathologic tissue examination have increasing, but by no means absolute, specificity. Individually, these are not sufficient to make a diagnosis; in combination, the diagnosis depends upon weighing probabilities and assessing the evidence *in toto*, an important component of which is estimation of past exposure. In practice, the diagnosis is usually established on radiographic and exposure evidence. An expert committee of the College of American Pathologists and the National Institute for Occupational Safety and Health has recently developed guidelines for the pathologic diagnosis of asbestos-associated disease. When lung tissue is available for histopathologic examination, a diagnosis of asbestosis depends minimally upon the demonstration of discreet foci of fibrosis in the walls of respiratory bronchioles associated with accumulations of asbestos bodies (light microscopy). Additional findings are diffuse interstitial pneumonia and fibrosis. Neither fibrosis or asbestos bodies alone is sufficient for the histopathologic diagnosis of asbestosis.

B. Non-malignant Pleural Effects

These include pleural effusions, focal hyaline thickening (plaques), and diffuse pleural fibrosis. Plaques indicate exposure, not disease, because they do not cause symptoms or functional impairment. Attributability is assessed on the basis of an exposure history and the absence of other causal factors.

C. Lung Cancer

The diagnosis of lung cancer in asbestos-exposed individuals is no different than in other clinical settings. In population studies of various occupational groups, evidence of asbestosis has been found when excess lung cancer risk is demonstrated for comparable levels of exposure. In the individual case of lung cancer, the cause cannot be determined precisely. For this reason, the judgement must take into account length, intensity and character of exposure, evidence of other asbestos-associated diseases, and smoking history.

D. Malignant Mesothelioma

The primary issue is valid diagnosis. This diagnosis can generally not be established clinically, or radiographically, or with pleural fluid examination, or with limited biopsy tissue. Since the potential for misdiagnosis is considerable, adequate tissue specimens should be examined by pathologists experienced and expert in the diagnosis of this tumor (e.g., mesothelioma panels). When the diagnosis has been established, a history of exposure, even if short, is sufficient for a judgement of causation.

II. Assessment of Impairment

This follows the establishment of an asbestos-associated disease. In cases of extensive asbestosis or extensive pleural fibrosis, reference should be made to criteria for impairment in restrictive disorders outlined in the ATS statement on evaluation of impairment/disability secondary to respiratory disease (attached). Use will be made of pulmonary function tests and exercise performance testing when necessary. Regional panels will be responsible for periodic updating of impairment level.

ATTACHMENT 1

American Thoracic Society

MEDICAL SECTION OF THE AMERICAN LUNG ASSOCIATION

EVALUATION OF IMPAIRMENT/DISABILITY SECONDARY TO RESPIRATORY DISEASE

THIS OFFICIAL ATS STATEMENT WAS ADOPTED BY THE ATS BOARD OF DIRECTORS, JUNE 1982

There are several classification schemes used for defining the degree of respiratory impairment (1–7). Some of these schemes are based on actual values of pulmonary function tests (3,4), while others use predicted values (6–8). One scheme is based on severe dyspnea (5). The Component Committee for Disability Criteria of the American Lung Association has reviewed these programs, as well as the best information available, in their efforts to develop impairment/disability criteria in respiratory disease that would standardize one's assessment of respiratory impairment. These recommendations are intended to apply equally to occupational as well as nonoccupational respiratory disease of any type.

A distinction has been made between the terms impairment and disability and the following definitions are presented:

Impairment: This is purely a medical condition. It reflects a functional abnormality that persists after appropriate therapy and with no reasonable prospect of improvement. It may or may not be stable at the time the evaluation is made. If severe, it frequently precludes gainful employment. It is always a basic consideration in the evaluation of disability.

Disability: A term that indicates the total effect of impairment upon a patient's life. It is affected by such diverse factors as age, gender, education, economic and social environment, and energy requirements of the occupation.

Two people with an identical impairment may be differently affected in their life situations.

The Committee believes that rating of health impairment falls within the province of a physician's expertise to quantitate. Determination of disability is an administrative decision that requires consideration of many nonmedical as well as medical variables.

I. Identifying Pulmonary Impairment

History, physical examination, chest radiographs, and pulmonary function tests are needed to establish a diagnosis and/or provide a frame of reference.

1. Medical History

Although comprehensive, the history taking should particularly address the specific problems of pulmonary impairment. For those who have an interest in developing epidemiologic data, the questionnaire of the American Thoracic Society's Epidemiology Standardization Project may be suitable (9). For those who do not prefer to use such a questionnaire, the history should include the following:

(1) Demographic and Clinical Information

(A) Identification

Basic information includes name, address, social security number, telephone number, date and places of birth and residence, age, and gender. The patient's race, marital status, highest grade completed in school, regularity and extent of exercise, may be helpful in selected situations.

(B) Dyspnea

One of the manifestations of reduced lung function and impairment is shortness of breath. The degree of dyspnea can be estimated by determining activities that provoke shortness of breath, i.e., distance walked, number of stairs climbed, etc. Dyspnea cannot be used as a sole criterion for evaluating impairment because the causes of dyspnea are multiple and complex. Furthermore, individual responses to a given degree of dyspnea vary and are influenced by factors unrelated to the extent of lung disease such as difficulty of verbal communication, preoccupation with health, and socioeconomic and educational backgrounds. Dyspnea should therefore be considered in combination with other clinical and physiologic factors (1, 2, 10–13).

(C) Cough, Sputum Production

Although cough occurs frequently in patients with chronic obstructive pulmonary diseases (COPD), only some will meet the criteria of chronic bronchitis, i.e., cough productive of daily sputum for at least three months out of the year for two consecutive years without other apparent cause. Thus, a detailed description of sputum as to volume, color, odor, consistency, and when expectorated, becomes important. Simple streaking of blood in the sputum may be observed in chronic bronchitis.

(D) Wheezing

The hallmark of reversible airway obstruction is the wheeze. Wheezing is so common in asthma that it is frequently forgotten that "all that wheezes is not asthma." Foreign bodies or tumors in airways can cause wheezing. Such wheezing is usually confined to one area of the chest. Wheezing may occur in patients with congestive heart failure. Usually these findings are of brief duration and associated with obvious signs of cardiovascular decompensation. An ominous sign in status asthmaticus is the absence of wheezing. Wheezing is presumably absent because the flow rates are low or the airways are filled with mucus, thus reducing the ventilation to large areas of the lungs. No discussion of wheezing is complete without a description as to frequency; occurrence during day, year; identification of causative factors; whether it limits one's capacity to function, etc.

(E) Environmental Exposure and Chronologic Occupational Data

Public awareness of the dangers associated with certain occupations has increased in recent years. However, enough workers are not familiar with occupational hazards to justify traditional screening questions related to mining, rock drilling, sand blasting, etc. Job titles such as "plasterer," "fireman," or "engineer" may be of little value because official titles tend to remain the same while job activities and hazardous exposures may change dramatically as a result of the development of new technology.

A detailed history of the employee's employment background should be presented in chronologic order. Vacation and part-time school employment, etc. should be included. In some cases, the spouse's job and exposure may be helpful. Finally the presence of pets, the use of forced air humidifiers, and the nature of hobbies should be determined. The employee should be questioned about specific hazardous

Reprints may be requested from your state or local Lung Association.

dust or fume exposure. If such an exposure occurred, the following indexes are helpful: (*1*) year first exposed to hazardous agent, (*2*) total years exposed, (*3*) estimation of the hazard level, and (*4*) years since last exposed.

(F) Use of Tobacco

Subjects should be classified as nonsmokers (never smoked), ex-smokers (stopped for at least one year), and present smokers. The smoking history should list type(s) of tobacco smoked (cigarette, pipe, or cigar), with an emphasis on cigarette smoking. The history should include such information as to age when the subject first started to smoke, the brands used, if and when the use of cigarettes was discontinued, and an estimate of pack-years smoked. Maximal smoking levels should be determined.

2. Physical Examination

Physical examination *should* contain specific observations that will enable the reviewer to obtain an understanding of the claimant's respiratory problem:

(1) General Description

Notation should be made as to the patient's position (standing, sitting, or supine) at the time blood pressure, heart, and respiratory rates are recorded. Height and weight should be noted, preferably in the metric system. Do the following occur during inspiration: *en bloc* movement of the chest, use of sternocleidomastoid and accessory muscles, paradoxical movement of the intercostal spaces posterolaterally and an attempt to elevate the chest cage by fixing the shoulders and leaning forward? Record the degree of thoracic muscle wasting, position, and extent of diaphragmatic motion as well as paradoxical movement between rib cage and the abdomen.

(2) Description of the Patient's Breathing

Does the patient exhale through pursed lips? Depth of breathing, tachypnea, hyperpnea, labored breathing at rest, as well as the inability to complete sentences because of dyspnea should be recorded. By listening over the trachea with a stethoscope, the forced expiratory flow following a maximal inspiration can be timed. Normally this takes less than four seconds, whereas it may take several times this in patients with airflow limitation.

(3) Cyanosis and Clubbing

In the presence of a normal hemoglobin concentration, cyanosis (central) involving the buccal mucosa and lips may not be seen until the arterial blood oxygen saturation is less than 75%. Clubbing, almost invariably absent in COPD but which occurs when lung abscess, empyema, bronchiectasis or asbestosis coexist, should consist of four components: softness of the nail bed, curvature of the nail, increase in soft tissue of the fingertips, and increased hyponychial angle of the right index finger (14).

(4) Adventitious Lung Sounds

The character of lung sounds should be noted during quiet and deep breathing. The relative duration of expiration and inspiration as well as the intensity of breath sounds can provide valuable information concerning obstruction to air flow. The latter has correlated well with pulmonary function measurements (15). Wheezing or rhonchi and crackles (rales) should be described as to intensity, location, and relationship within the respiratory cycle, i.e., inspiration, expiration, or both. Crackles may be present in two-thirds of patients with chronic interstitial disease such as asbestosis and desquamative interstitial pneumonia. These crackles usually occur during late inspiration and are described as fine end-inspiratory crackles (16). Early inspiratory crackles may be heard in diseases of air flow obstruction and particularly in bronchiolitis obliterans (17).

(5) Cor Pulmonale

The term cor pulmonale means pulmonary heart disease and is associated with chronic diffuse interstitial disease, etc. If right heart failure accompanies cor pulmonale, neck vein distension occurs above the upper level of the manubrium sterni when the patient is lying supine. These veins fill from below, and their volume does not decrease when the thorax is elevated to a 45 degree angle from the horizontal. Dependent edema, increased hepatic size in the right midclavicular line, or both may confirm the existence of heart disease if these findings are not secondary to other causes. Not uncommonly along the left sternal border or over the epigastrium there is a right ventricular early diastolic gallop rhythm that tends to be increased on inspiration (18).

3. Chest Roentgenograms

Minimal radiographic examination should consist of posterior-anterior (PA) and lateral views taken on deep inspiration. Chest radiographic findings often correlate poorly with physiologic findings in diseases of airflow limitation such as asthma and emphysema. No correlation between work status and roentgenographic findings has been noted. However, as part of the overall evaluation for impairment/disability, the chest radiograph should be described in terms of hyperinflation, loss of vascular markings, presence of bullae, flattened diaphragms, increase in retrosternal air space, sternophrenic angle, and PA diameter. Cardiac abnormalities or evidence of cor pulmonale should be noted. Finally, almost 10% of patients with histologically-confirmed diffuse infiltrative disease had normal film findings before biopsy (19).

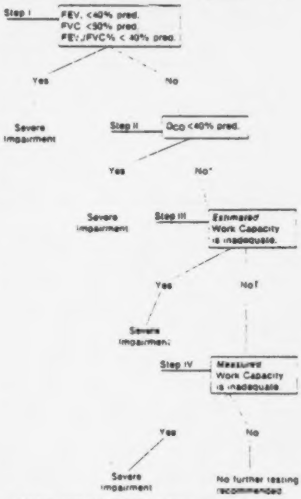
In diseases with rounded opacities, such as coal worker's pneumoconiosis, correlation between physiologic and roentgenographic abnormalities is poor. The only exception is when there is radiographic evidence of progressive massive fibrosis (PMF). As the PMF intensifies there is sometimes a significant reduction in the ventilatory capacity.

If the disease is a mixed reticular-nodular pattern such as sarcoidosis, the correlation is frequently quite poor. However, the extent of diffuse linear opacities seen in interstitial pneumonias or asbestosis, correlate with physiologic abnormalities (20). Although previously suggested (21), the Committee believes that the recently revised international code (ILO 1980) (22) for pneumoconiosis classification should be used in describing all types of diffuse interstitial lung disease.

II. Rating of Respiratory Impairment

1. Test Schema

The Committee recommends the following test schema for determining whether an individual is severely impaired by respiratory disease. (See text for further explanation.)



* If FEV₁, FVC, FEV₁/FVC%, and Dco are above the lower "cut-off" limits—stop.

† Not sure, see text when next step in Test Schema should be requested.

2. Selection of Tests

(1) Forced Spirometry Measurements (Step I)

Three measurements of pulmonary function are included in this step, i.e., FVC, FEV_1, and $FEV_1/FVC\%$. If the results recorded in *any* of the three measurements are below the lower "cut-off" limits, the individual is declared severely impaired, and *no* further pulmonary function testing will be requested.

The subjects should be evaluated after they have received optimum therapy and are at their optimal health condition. If wheezing or other evidence of bronchospasm is present at the time of the examination, the ventilatory studies should be repeated after the administration of a bronchodilator.

If isoproterenol is used, one should wait ten minutes after administering two inhalations or a dose of 250 μg. If either metaproterenol or isoetharine is used, one should wait 15 to 20 minutes before repeating the spirometric studies.

The spirometric measurements should be performed as described in the Epidemiology Standardization Project (9). The equipment, methods of calibration, and technique used should meet the criteria outlined in the ATS Official Statement, "Standardization of Spirometry" (23).

Height should be measured with the subject standing in his/her stocking feet. If subject cannot stand, or suffers from spinal deformities, height should be considered as equal to the arm span (maximal distance between the tips of the middle fingers when the arms are stretched out against the wall) (24).

The Committee acknowledges that studies have documented that the FVC and FEV$_1$ of black males are somewhat lower than those for white males of the same age and height (25, 26). However, a separate prediction equation is not recommended because such equations are not available for other ethnic groups.

The prediction equations listed in this report are those of Crapo et al. (27), which were obtained in a group of nonsmoking, asymptomatic subjects with normal physical examinations and chest roentgenograms.

When the Committee selected the FEV$_1$, FVC, and FEV$_1$/FVC% as the tests for classifying severe impairment, it had to decide between using actual or predicted values. This posed certain philosophical as well as scientific questions (28, 29). *Because the physician is concerned primarily with the definition of impairment and not the direct determination of disablement, the Committee recommends the use of percent predicted value where ratings of impairment compares the individual's organ function with a comparable group of healthy individuals.*

(A) Forced Expiratory Volume in First Second (FEV$_1$)

The measurement should be made on the best spirogram recorded either pre- or post-bronchodilator. *If a subject has a FEV$_1$ of 40% of predicted or less, this individual is eligible for a severe impairment rating (7).* The lower limit of normal of the FEV$_1$ is equal to the value obtained when the 95% confidence interval is subtracted from the predicted value. The regression equations of Crapo et al. (27) are acceptable for predicted values:

Test	Units	Equation	95% Confidence Interval
Males			
FEV$_1$	L-BTPS	0.0414H-0.0244A-2.190	0.842
Females			
FEV$_1$	L-BTPS	0.0342H-0.0255A-1.578	0.561

L-BTPS = liters at BTPS; H = height (cm); A = age (years).

(B) Forced Vital Capacity (FVC)

The FVC is measured along with the FEV$_1$. *If a subject has a FVC of 50% of predicted or less, this individual is eligible for a severe impairment rating* (7). The lower limit of normal of the FVC is equal to the value obtained when the 95% confidence interval is subtracted from the predicted value. The regression equations of Crapo and associates (27) are acceptable for predicted values:

Test	Units	Equation	95% Confidence Interval
Males			
FVC	L-BTPS	0.0600H-0.0214A-4.650	1.115
Females			
FVC	L-BTPS	0.0491H-0.0216A-3.590	0.676

L-BTPS = liters at BTPS; H = height (cm); A = age (years).

(C) FEV$_1$/FVC Ratio Expressed as a Percentage

If a subject has a FEV$_1$/FVC% of 40% of predicted or less, this individual is eligible for a severe impairment rating. Kanner and associates (30) have found that these individuals have a statistically significant shortened life span. The lower limit of normal is equal to the value obtained when the 95% confidence interval is subtracted from the predicted value. The regression equations of Crapo et al. (27) are acceptable for predicted values:

Test	Units	Equation	95% Confidence Interval
Males			
FEV$_1$/FVC	%	−0.1300H-0.152A + 110.49	8.28
Females			
FEV$_1$/FVC	%	−0.2020H-0.252A + 126.58	9.06

H = height (cm), A = age (years).

(2) Diffusing Capacity (Step II)

The D$_{CO}$ should be performed when respiratory complaints continue unabated in spite of forced spirometric measurement results above the cut-off limits.

The methodology for performing the single breath diffusing is basically that described in the 1978 American Thoracic Society Epidemiology Standardization Project (pp. 62-72) (9). Crapo and Morris (31) have derived prediction equations based on measurements of D$_{CO}$ in a large group of nonsmoking, asymptomatic subjects with normal physical examinations and chest roentgenograms. These values have been normalized to standard hemoglobin concentrations for males (14.6 gm/100 ml) and females (12.8 gm/100 ml)[1]:

	95% Confidence Interval
Males	
$D_{CO} = 0.410H - 0.210A - 26.31$	8.2
Females	
$D_{CO} = 0.287H - 0.148A - 10.34$	5.7

H = height (cm), and A = age (years).

If a subject has a D$_{CO}$ of 40% of predicted or less, this individual has severe impairment (7). The lower limit of normal is equal to the value obtained when the 95% confidence interval is subtracted from the predicted value.

Measurements of the diffusing capacity are affected by many factors. A decrease in hemoglobin concentration of 2.5–3.0 gm% will reduce the value of the diffusing capacity by approximately 10%. Corrections can be made for severe anemia or polycythemia using established procedures (31). The change in alveolar oxygen tension seen at moderate altitude (5,000 feet above sea level) or with alveolar hypoventilation theoretically may affect measurements by as much as 5%. However, these are secondary effects that usually are of little significance and are smaller than the variability of the test itself. Ideally, each laboratory should develop its own prediction equations based on studies obtained in a reasonably large number of subjects. This is particularly important if measurements are made under different conditions or using different procedures than those recommended. Alternatively, appropriate prediction equations from the literature may be used if they were obtained under similar experimental circumstances.

(3) Estimated Work Capacity (Step III)

Maximal oxygen uptake achieved during graded increments of exercise provides an objective measure of an individual's capacity to work. Oxygen uptake can be measured directly or estimated from power output generated during treadmill or ergometer exercise.

Work capacity studies are *not* recommended for individuals whose Steps I and II pulmonary function study results are either within the 95% confidence interval or less than 40% predicted. The Committee, however, recommends the use of work capacity studies under the following circumstances:

---

[1] The prediction equation for females is slightly different than that published in the original report (31), because this equation is normalized to a hemoglobin concentration of 12.8 gm/100 ml rather than 14.6 gm/100 ml.

> When the results of the Step I and II pulmonary function tests are above the severe impairment cut-off point or below the 95% confidence interval and the claimant states he/she is physically unable to meet the demands of a specific job because of breathlessness.
>
> When the claimant has not performed maximally or correctly in the Step I and II studies.

Exercise testing should not be performed on individuals who have medical contraindications in the opinion of the examining physician.

The criteria for stopping the test include: extreme fatigue, intolerable leg muscle pain, a decrease or lack of increase in systolic blood pressure with increasing workload, an increase in diastolic pressure of more than 20 mmHg above the resting value, severe systolic hypertension (greater than 260 mmHg), a burst of three or more successive premature ventricular contractions, recurring multifocal premature ventricular contractions, major left intraventricular conduction disturbance, symptomatic ST-T segment depression or elevation greater than 2.0 mm, tachyarrhythmia greater than 85% of the age adjusted heart rate maximum, signs of insufficient peripheral circulation or cardiac output, i.e., pallor, cyanosis, clammy skin, nausea, dizziness, or muscle cramps (32, 33).

The Committee reviewed a number of articles (34–39) and decided to follow the exercise testing procedure described by Jones (40) in estimating the work capacity. The $\dot{V}O_2$ is not measured directly but rather can be obtained once the power output (KPM/min) is determined. Through the use of the Wick's graph (40), one can obtain comparable power output results with either the cycle ergometer or the treadmill (Appendix A). Formulas for calculating the energy requirements for various activities such as treadmill walking, jogging/running, bicycle ergometry, etc., are presented in reference 41.

An incremental work test is most commonly used to obtain the maximum power output. On a cycle ergometer the subject starts exercising at 100 KPM/min and the power output is increased by 100 KPM each minute.

Small women and children start at 50 KPM and are increased by 50 KPM each minute (40). Ideally, the treadmill test should be performed at three mph (Wick's protocol [38]), but it may be necessary to start at a slower speed and increase it each minute, i.e., 1.5 mph 0% grade for one minute, 2.5 mph 0% grade for one minute, and 3.0 mph 0% grade for one minute. Finally, leave speed at 3.0 mph and increase grade by 2.5% each minute. The latter will increase work by increments of approximately 100 KPM/min.

Because of a linear relationship between $\dot{V}O_2$, heart rate, and ventilation, a concomitant rise in the latter two should be recorded during exercise (34, 42). If maximal heart rate values are of the order of 210 (0.65 × years), the participant is probably being adequately stressed (40). On average, when the subjects are working up to about 85% of their maximal heart rate, they have reached 75 to 85% of their $\dot{V}O_2$ max (43, 44). A reduction in the ventilatory capacity will also limit exercise ventilatory capacity (V_E) and exercise will cease at a $\dot{V}O_2$ below the predicted maximum. In 1975, Spiro and associates (34, 45) presented this relationship for determining whether the $\dot{V}O_2$ max is acceptable in the COPD patients by comparing the observed $\dot{V}_E$ with the predicted ventilatory capacity which he calculated as follows:

$$\dot{V}_E = (FEV_1 \times 18.9) + 19.7.$$

For normal subjects or patients with nonobstructive pulmonary defects, Jones (40) finds that the maximum ventilation able to be sustained during four minutes of exercise is:

$$\dot{V} = FEV_1 \times 35.$$

The equipment required for Step III includes a carefully calibrated treadmill or cycle ergometer, an electrocardiograph for recording the heart response to exercise, low resistance valve, and a means of accurately measuring minute ventilation. If hypoxemia is anticipated during exercise, ear oximetry is simple and often helpful. A 5% drop in the Sa_{O_2} is considered meaningful. There should be ready access to emergency equipment and drugs (33, 44, 46).

The Committee has reviewed the findings of Roemmich and associates (47). Coal miners taller than 165.1 cm (5 ft. 5 in.), provided the FEV_1 was over 50% of the predicted figure, were capable of sustaining a level of work requiring a $\dot{V}O_2$ max of 1.75 L/min or 7.0 + METS.[2] This level of work is relatively strenuous and in excess of the usual energy demands made on coal miners. Michael et al. (48) noted that their subjects could walk on a treadmill for eight hours, without undue fatigue, if the energy costs did not exceed 35% of the $\dot{V}O_2$ max. Three observations presented by Astrand were also evaluated (44):

> Working at his/her own pace, work output can be sustained for an eight-hour period if one does not exceed 40% of his/her attained $\dot{V}O_2$ max.
>
> For shorter periods of time one can work effectively at about 50% of achieved $\dot{V}O_2$ max.
>
> If one functions under test conditions for at least five minutes at a rate of work demanding a $\dot{V}O_2$ of 2.5 L/min, he/she can most likely work under steady state conditions for hours with a $\dot{V}O_2$ of one L/min.

The Committee thus considers the claimant to be severely impaired if 30–40% of his/her observed $\dot{V}O_2$ max does not allow the claimant to meet the $\dot{V}O_2$ costs of his/her occupational activities over an eight-hour period (43, 49–51). If a $\dot{V}O_2$ max of 15 ml/(kg · min) cannot be reached, the participant should be considered impaired for practically all types of labor (42).

(4) Measured Work Capacity (Step IV)

Measured work capacity studies should be requested whenever one is not sure that the work capacity was properly recorded in the Step III study. The following could serve as a basis for doubt:

> Inappropriate changes observed in either the heart rate and/or $\dot{V}_E$.
>
> Subject unable to complete the test because of nonrespiratory symptoms, i.e., leg muscle fatigue, etc.
>
> Doubt about the predominant factor(s) responsible for the respiratory symptoms.

Step IV exercise protocol can be either that used by Jones (40) or one the performing laboratory regularly uses. If the Jones approach is used, the subject will be studied in the steady state[3] at rest and at one third and two thirds of the maximum power output obtained during the Stage III incremental work test. An arterial blood specimen obtained during exercise may provide additional valuable data concerning pulmonary gas exchange.

Other details concerning the performance of Step IV *per se* can be found in the narrative presented in Step III as well as the following references (52–54).

The definition of severe impairment is the same as presented for Step III.

(5) Arterial Blood Gases

Abnormal arterial blood gas values can be a partial reflection of chronically impaired lung function. For the obstructive lung diseases, the FEV_1 correlates better with an ability to work than the resting Pa_{O_2} level (55). The Committee does not recommend arterial blood gases for initial screening. If hypoxemia is suspected, these studies can be utilized at Step III or IV of the evaluation.

Arterial blood gas studies should be reserved for selected cases and then performed under rigidly controlled laboratory conditions.

An individual is impaired if he/she is in a stable condition, is receiving optimal medical therapy, and meets either of the following criteria:

---

[2] METS is an abbreviation for multiples of the resting energy requirement, assumed to be 3.5 ml O_2/(kg · min).

[3] Steady state. Variations of less than ± five beats in the cardiac frequency, of less than ± three mm Hg in end-tidal P_{CO_2}, and of less than ± 0.1% in expired CO_2 and O_2 concentrations indicate an adequate steady state (40).

(*1*) Resting arterial $Po_2 < 55$ mm Hg while breathing room air

(*2*) Resting arterial $Po_2 < 60$ mm Hg while breathing room air together with evidence of one or more of the secondary conditions related to arterial hypoxemia (56) including:

Pulmonary hypertension as determined by cardiac catheterization.

Cor pulmonale as exhibited by electrocardiographic and chest radiographic changes.

Increasing severity of hypoxemia as noted by blood samples from an indwelling arterial cannula or by the ear oximeter while exercising on a treadmill for no more than six minutes at two mph, zero% grade.

Erythrocytosis confirmed by complete blood count, and if necessary, the use of radioactive nuclides to measure red blood cell mass and plasma volume.

Patients with chronic obstructive pulmonary disease meeting these criteria have a significantly improved survival when treated with continuous oxygen therapy (57). The values for arterial Po_2 in these guidelines should be appropriately adjusted to reflect the altitude at which the blood specimen is obtained. Hypoxemia must be documented on two occasions with an interval between observations of at least four weeks because many patients will improve significantly during this time when receiving optimal medical care (58).

(6) Other Tests (Not Recommended)

(A.) Maximum Voluntary Ventilation

The maximum voluntary ventilation (MVV) first presented in Germany more than 40 years ago was useful because the FEV_1 had not been described (59). It is not as useful as the FEV_1 for the following reasons:

The test has a much larger learning effect.

It is much more fatiguing.

Because of the more rapidly changing flow rates, the instrument requirements are more rigid.

In interstitial disease, the MVV may be normal even when there is a severe impairment of gas exchange.

The 1978 ATS Epidemiology Standardization Project lists the MVV as an optional pulmonary function test (9).

(B.) Miscellaneous Tests of Flow and Volume

The $FEF_{25-75\%}$, closing volume, closing capacity, and volume of isoflow are tests that appear to detect changes in small airways of less than two millimeters internal diameter and are not recommended for the assessment of impairment.

III. Special Considerations when Interpreting and Reporting Findings

1. Applicant Severely Impaired by Asthma

An asthmatic is considered severely impaired if carefully documented severe attacks of bronchospasm requiring emergency treatment by a physician occur at least once every two months or on an average of at least six times per year despite therapy judged as optimum by a specialist in respiratory disease. The claimants should have prolonged expiration with wheezing or rhonchi between attacks to meet criteria established by the Social Security Administration (32).

2. Applicant Not Properly Diagnosed and/or Treated

The name or diagnosis given to the symptoms or syndrome that the medical profession accepts as evidence of ill health has importance for purposes of impairment/disability evaluation. The diagnosis provides a means to decide upon the type of evidence necessary to describe impairment and the form of examination and laboratory procedures necessary for diagnosis. Clearly, if an earlier diagnosis is incorrect, the examiner should submit the correct diagnosis.

3. Applicant Refuses or Has Not Received Commonly Accepted Regimen of Therapy

By definition, regardless of the reason(s) given, decisions concerning severe impairment should not be made until after appropriate therapy and only when there appears to be a reasonable prospect of no further improvement. If the participant is not being treated or has refused therapy generally considered likely to improve the claimant's condition, this should be recorded.

4. Applicant Has Coexisting Diseases

When two disease processes coexist, it is important to present a separate evaluation for each diagnostic entity and indicate the major impairing condition. The examination should be sufficiently detailed in order that this distinction can be made. Although each disease by itself may not be disabling, the sum of the disorders may be.

5. Applicant's Refusal or Inability to Cooperate During Examination

If there is an unreasonable refusal or inability on the part of the claimant to cooperate in the performance of the requested studies, this should be recorded.

6. Applicant Deconditioned

A state of poor conditioning should be described when the level of impairment is primarily attributable to a deconditioned state resulting from illness, recent hospitalization, physical inactivity, obesity, malnutrition, etc.; this fact(s) should be recorded and retesting after appropriate remedial action should be recommended.

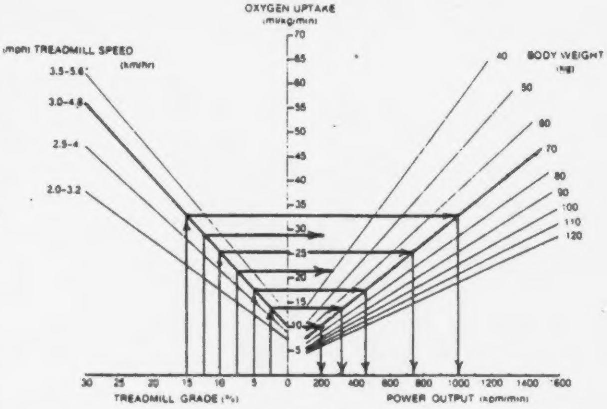
7. Applicant Beyond Retirement Age

Retirement age is irrelevant in determining cardiopulmonary impairment, but is important in a disability evaluation. Established procedures prevail for anyone referred for an evaluation.

8. Death Cases

Whenever possible, obtain all medical evidence, including the death certificate, that may help in the determination of impair-

Appendix



Equivalent Power Output Graph

ment and/or disability. The death certificate by itself is never sufficient.

9. Applicant Has Disability Without Impairment

Just as impairment can exist without disability, the reverse is true. Tuberculosis, bronchiectasis, sleep apnea (alveolar hypoventilation syndrome) are examples whereby disability can exist without measurable lung function impairment.

Appendix A

Using the Wicks graph (40), the treadmill speed and elevation are converted into an equivalent power output obtained with a cycle ergometer as follows: A 70-kg subject is exercised at three mph, using progressive increments in elevation of 2.5% each minute (38). A vertical line is drawn from the Treadmill Grade (%) to the speed isopleth. A horizontal line is next drawn to the isopleth for the subject's weight. Then a vertical line is dropped to the Power Output line. This is repeated for each increment of elevation reached.

The graph may also be used to predict the $\dot{V}O_2$ from the data obtained during both the treadmill and cycle ergometer tests. Prediction equations are available to provide the same information (40, 41).

Prediction of Maximal O_2 Intake ($\dot{V}O_2$ max) (40):

Males

$\dot{V}O_2$ max = 4.2 − 0.032 age L/min (SD ± 0.4)
$\dot{V}O_2$ max = 60 − 0.55 age ml/kg·min) (SD ± 7.5)

Females

$\dot{V}O_2$ max = 2.6 − 0.014 age L/min (SD ± 0.4)
$\dot{V}O_2$ max = 48 − 0.37 age ml/kg·min) (SD ± 7.0)

This statement was prepared by an Ad Hoc Committee for disability criteria of the American Lung Association/American Thoracic Society. The committee members are as follows:

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Senator NICKLES. Thank you, Dr. Jones. I appreciate your coming from Tulane to share some of your thoughts on this legislation with us.

Does the American Lung Association consider asbestos-related lung disease more serious than, say, cigarette or other smoking diseases, cancers?

Dr. JONES. I think I would rather answer that by saying that both are preventable theoretically and practically, and our position is that people should refrain from doing that which injures their lungs or the lungs of other people, and tobacco on a sheer volume basis, of course, is a much greater problem, a much greater social problem, than is asbestos, but both are preventable.

Our approach is to advocate whatever it takes to prevent these sorts of diseases. Tobacco, of course, is a matter of personal choice and habit, and we always have to view this as something where our zeal to prevent disease might infringe on individuals' rights. Asbestos is concerned with the right of a worker to have a safe workplace, and I think that the Congress and the society in general, despite statements concerning shortcomings of OSHA regulation, have in fact taken the view and the stance that workers are entitled to a safe workplace.

I think even the industries that may sue or litigate against particular aspects of certain regulations have still for one reason or another generally gone along with society's desires that the workplace be cleaned up.

For anyone who knows what the situation is like now in the asbestos manufacturing industry, their plants are enormously cleaner, almost infinitely cleaner, than they were 20 years ago.

So both are problems. Both are preventable. On a statistical basis, smoking is a far larger problem, but we should give our attention wherever we can expect our attention to pay off in reduced disease and death.

Senator NICKLES. You mentioned diagnosis in your statement. How do you diagnose whether or not an individual has an asbestos-related disease?

Dr. JONES. It is different for the different disorders. You can recognize with such a high degree of probability that a pleural plaque is, in fact, an asbestos-related abnormality that one hardly even needs a history of exposure.

Senator NICKLES. But a pleural plaque by your previous definition was not one that would be worthy of compensation. It would be one that would cause no abnormalities as far as life expectancy.

Dr. JONES. That is overwhelmingly true. In the main, of course, the plaque is a surrogate of exposure, and a person with the plaque may by virtue of the exposure that gave him the plaque, contract something else. But for asbestosis, the diagnosis in the vast majority of cases can be adequately based on a history of occupational exposure that connotes a really substantial risk of developing it and the x ray findings that suggest that, in fact, that risk has come to pass and the individual has developed it.

Senator NICKLES. You think a combination of their past exposure patterns, plus the x rays, would be sufficient?

Dr. JONES. To diagnose asbestosis, in the majority of cases, there's only one major caveat to that, and that is if there is another condition coexisting in the same individual that could be as likely an explanation of the x ray changes that you would otherwise impute to the asbestos exposure. Then in those cases biopsy may be required simply because the prior probability that we can use in an untrammeled fashion if we have only asbestos exposure to consider may be substantially reduced, for instance, in the individual who has rheumatoid arthritis or certain other conditions that can cause similar scarring conditions of the lung.

Senator NICKLES. Is it possible to make some kind of distinction, say, for the person who had heavy exposure to asbestos while at the same time had heavy smoking patterns?

Dr. JONES. I do not think smoking has to be considered in the diagnosis of asbestosis. I think smoking may have to be considered quite strongly in the amount of impairment that an individual has. Because asbestos exposure causes shrinking and stiffening of the lung and smoking causes the laxity and ballooning out of the lung, these things produce different functional patterns, and smoking may be responsible even in a person with asbestosis, for the majority of his impairment.

Now, it is clearly beyond my expertise to tell you whether that ought to be considered and what sort of compensation the individual should receive. My own personal feeling is that an individual disabled by breathing difficulties is probably as much in need as another individual with a similar degree of disability, irrespective of whether tobacco, or asbestos, or the two together, caused it. But much of the functional impairment of the persons with asbestosis is related to tobacco, but the issue of diagnosing asbestosis does not, I think, involve a decision as to whether the individual smoked or not.

I agree, too, that with the question of whether the occupational cancers, formulation of whether such are attributable to asbestos exposure ought or ought not to take smoking into account, the only evidence on the subject is that from Drs. Selikoff's and Hammond's studies. The multiplier is five for asbestos exposure irrespective of smoking, and therefore, it becomes largely irrelevant whether an individual who develops a lung cancer smoked or did not smoke, if he is in a group as heavily exposed as a New York insulator.

I am not at all sure that the estimates here which lean heavily on the insulator exposures are applicable to this much wider group of individuals who have had intermittent or casual or indirect or short-term exposure to asbestos. I think probably the least defensible way of approaching the disease burden estimate is to believe, for instance, that everyone exposed is going to be sick. But the second least defensible approach is to identify people with the heaviest exposures and then assume that everyone's health risks are going to approximate those of heavily exposed persons.

But whichever group of estimates you accept, you can take steps in reform of compensation, and not just for asbestos victims, but for every other sort of occupational illness like this, by making a medical determination the first part of the process and having a certain identification of, not who is projected to get sick, or who is at risk of getting sick, but who, in fact, got sick. And those are the ones that we, I think, as the public, and speaking as a member of the public, wish to see get the available resources that are here for compensation.

They will always be limited, and we want the resources that are available to go to the people who have actually suffered as a result of their occupational exposure.

Senator NICKLES. I would agree with that; and, I would imagine that most Members in Congress, and probably most people who are associated with this problem, would agree with your statement. We do want those benefits to go to those persons who are sick from the disease.

The big issue is identifying it. Then who is going to pay for it? We will discuss that at later hearings.

Do you believe there is a large number of claimants receiving compensation today who do not have asbestos-related disease?

Dr. JONES. I do not know about those who are receiving compensation, but I do know from personal experience that a large number of persons who bring claims have really no evidence of occupational illness. It seems to be an almost overwhelming temptation for people who are short of breath and who worked around a hazardous substance to believe or at least to assert that they were damaged as a result of working.

A large number of claims being brought today are specious.

Senator NICKLES. A large number or the large number?

Dr. JONES. A large number of claims are specious, and in my own experience, even from heavily exposed asbestos manufacturing workers, only the minority have significant occupational injury, the minority of those who are bringing claims today.

Senator NICKLES. Do you believe that by diagnosis through x rays, plus looking at their past history, would be sufficient to make a diagnosis to determine whether or not compensation would be in order?

Dr. JONES. Almost always for asbestosis. Now, in the case of cancers, it is a more complicated problem, and this would require something more than the looking at x rays because x rays are an excellent way of getting an idea that a cancer is present, but a very poor way of diagnosing the cancer, and the diagnosis of cancer and the consideration of how big the total lung burden of asbestos is, whether there is co-existing asbestosis requires a lot more exertions than does the diagnosis of asbestosis itself, which is, in the overwhelming main, diagnosed in living people and those for whom you will have x ray and exposure history and not anything else.

I think it is a very satisfactory way of diagnosing asbestosis. Only the small minority of persons in whom that diagnosis is suspected require confirmation by lung biopsy.

Senator NICKLES. That biopsy would be necessary by actually opening the chest? There is not a simple way?

Dr. JONES. That is for only the smallest fraction of people in whom the diagnosis of asbestosis is suspected. For most the diagnosis can be conclusively refuted or conclusively established on the basis of the exposure history, the presence of a positive chest x ray, in the absence of some confounding condition that would be equally as likely to explain the x ray changes.

Senator NICKLES. Dr. Jones, thank you very much.

Our next panelist is James Vermeulen, executive director of Asbestos Victims of America from California.

Mr. Vermeulen, welcome. You came from some distance, and I appreciate your appearance before the committee today.

STATEMENT OF JAMES E. VERMEULEN, EXECUTIVE DIRECTOR, ASBESTOS VICTIMS OF AMERICA, ACCOMPANIED BY CHARLES O'REILLY, ESQ. AND GEORGE ROSENBERG, ESQ.

Mr. VERMEULEN. Thank you, Senator, and before I begin, I would like to take the opportunity to thank you and your committee for making my appearance here possible.

I would also like to apologize for the encumbrance I have to wear. This breath of life is a necessary item from time to time as my condition worsens. I would hope that it will in no way detract from what I have to say and the contribution I intend to make.

It is my desire not to be a part of the problem. I would rather be a part of the solution.

I have with me today Mr. Charlie O'Reilly and George Rosenberg, attorneys from the Los Angeles area who work in association with AVA from time to time.

My name is James E. Vermeulen. I am the founder and executive director of Asbestos Victims of America.

The plight of the victims is beyond anything I had anticipated when I began AVA about 3 years ago. The astonishing growth rate of our national membership clearly denotes that victims are demanding to be heard.

In 1957, I went to work for Johns Manville in their Stockton, California plant, and worked there until 1966. We were constantly exposed to asbestos fiber. Management never told us asbestos dust was harmful. The only thing I knew about asbestos was the commercial use to which it was applied.

Because of all of the asbestos dust flying around, we had it in our hair and we had it on our clothing. We carried it into our automobiles. We went home. We hugged our kids and our wives, and our wives would shake out our clothes before washing. We were the "Typhoid Marys" of our era because we carried death home with us, along with our empty lunch buckets.

In 1977, when the time bomb of asbestos exploded within my chest, my American dream turned into a nightmare. I was diagnosed as having asbestosis and told that I was unemployable, that my income-producing days had stopped forever.

Now, I am certain there are those here who are wondering how can a person look so well and be so ill. Let me inform you that when I am completely at rest my heart is working at maximum capacity to process oxygen through the blood stream. Consequently, many asbestos victims die of heart failure.

We have also lost our immune defense mechanisms. We cannot fight the common cold, and it quickly goes into pneumonia, and we die. Now, our death certificates will say cause of death: heart failure; cause of death: pneumonia. What they fail to state is that the cause of death actually was caused by asbestos.

Only in the final stages of asbestos diseases will our physical appearance deteriorate rapidly and visibly, comparable to the pathetic photographs of prisoners from the German concentration camps after World War II, and I doubt that anyone having seen these photographs can ever forget the stark visual portrayals of human suffering. You see in the early stages, sick lungs do not show.

I filed for Workers Compensation in October 1977. As these procedures dragged on, we paid approximately $11,000 for my medical care. Because I had an occupational injury, our insurance company would not pay.

But in comparison, I am lucky. Here is an 18-foot-long hospital bill. Somebody can grab it, stretch it out. You have to see it to believe it. This bill totals over $36,000. It was given to me last week, Saturday, in San Francisco by a member of AVA. He is dying of asbestosis. He was in the hospital on this occasion for 42 days, but this was his 14th trip to the hospital.

Now, don't you think it would be fair that his employer, Bethlehem Steel, were to pay this bill?

I want to comment on something Dr. Nicholson said a few moments ago in his testimony about asbestos-diseased people living in trailer parks and boarding houses, et cetera. I can imagine there is a hell of a lot of the medical society and hospitals now owning the homes of the wounded workers of this nation or the mortgage companies, or whoever gobbles them up.

Somebody has to pay these bills. It should be the victimizer and not the victim.

In 1980, part of my 1977 Workers Compensation case was finally settled. My net award was $8,932.50. The court also awarded me rehabilitation benefits, which Manville refuses to pay. I have my next compensation trial scheduled in June of this year because California recognizes asbestosis as a temporary disability. Every 5 years I must go through the humiliating and demoralizing experience of requalifying for Workers Compensation.

If the State of California falsely decides that my irreversible asbestos disease has gone into remission, that will end forever all possibilities of any future claim. Needless to say, Manville's attorney will be present trying to influence the judge to reach this decision.

And if I should develop lung cancer in the 6 year when that decision is reached, I will have no recourse left to me whatever.

Now, I consider an amputated arm a temporary disability. The person can be fitted with a prothesis and rehabilitated for gainful employment, but for us there is no hope. Asbestosis is irreversible, and becomes progressively worse as time goes on. There is no prosthesis for sick lungs.

In California we have a law, AB-946, which was passed to enable asbestos victims to receive compensation during their lengthy litigation for compensation. After 1 year of operation for AB-946, only eight cases had been processed, paying an average of $2,437.50 for each case. A total of $12,000 was spent on medical examinations, and a total of $125,000 was spent for salaries and administrative costs.

Throughout our entire nation the asbestos victim is treated with contempt. We are made to feel like the criminal instead of the victim. In fact, our State and nationwide compensation systems are nothing more than a sad, sick joke.

I had worked for a living. I provided for my own needs and the needs of my family. I paid taxes so our State and Federal governments could function. I have never been one of the freeloaders at either end of our society's financial structure. Consequently, I believe that when I became a victim of my employment and unable to earn a living that I should be compensated immediately and adequately, and unfortunately this is not the case.

I have a personal injury suit pending against Manville, personal injury and fraud because they never told me asbestos was a killer. Their filing of chapter 11 bankruptcy has put my suit into the deep freeze.

Now, if I commit premeditated murder, if I kill one person, the courts will deal with me. If I kill 15 or 20, I will probably be locked up in a mental institution. Therefore, it is totally inconceivable to me that an industry who has been proven to be the killer of thousands and thousands of Americans can file bankruptcy to escape punishment for their crime.

The future is, indeed, dark. The continued indiscriminate use of asbestos must be stopped and the victim's right to sue must be upheld. The tort system is a must for our society over and above any compensation system for employees. Any asbestos disease compensation program must have at least two financial contributors: industries and insurance companies. With any compensation the tort alternative must continue as an option to the disabled worker. This is the only way a compensation system can be kept honest.

The product liability bill, S. 44, would abolish the right of tort suits for asbestos workers without providing any improvement at all over present miserable compensation laws. Companies and the Congress must understand that they will be held accountable unless they will make every effort to protect and compensate the workers and society.

Murder of American workers can no longer be tolerated because dying is a tough way to make a living, and we must be permitted to live out our lives in dignity, not poverty.

Once again, I thank you for the privilege of being here today.

Senator NICKLES. Thank you very much, Mr. Vermeulen.

[The prepared statement of Mr. Vermeulen follows:]

ASBESTOS VICTIMS OF AMERICA'S
STATEMENT FOR THE RECORD

BEFORE THE LABOR SUBCOMMITTEE

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES

TUESDAY, APRIL 24, 1984

BY:
JAMES E. VERMEULEN

FOUNDER/EXECUTIVE DIRECTOR

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Asbestos Victims of America was conceived by me, and born in the spare bedroom "office" of my home three years ago when it became obvious that my plight as an asbestos victim was being totally ignored. Not only by our workers compensation in the State, but also by the Federal Government and by the industries who caused my injury.

We now have members throughout the entire United States. The plight of the Asbestos Victims is beyond anything I had anticipated when I began AVA, and the astonishing growth rate of Asbestos Victims of America clearly denotes that victims are demanding to be heard.

I'm certain there are those in the audience who are wondering, how can a person look so well and be so ill. Let me inform you that when I am seated, completely at rest, my heart is working at maximum capacity to process oxygen through my blood stream. Consequently, many asbestos victims die of heart failure. We have also lost our immune defense mechanism against the common cold, we quickly develop pneumonia and die. Our death certificates will state cause of death as Heart Failure, or Pneumonia. I doubt that these certificates will contain the statement, "Caused by Asbestosis". Should we escape heart failure or pneumonia, while we slowly suffocate, only in the final stages of asbestos caused suffering will our physical appearance begin to deteriorate, rapidly, and visibly. Our appearance will then be comparable to the pathetic photographs of prisoners released from the concentration camps in Germany after World War II. I doubt, - that anyone here, - having seen these photographs can ever forget these stark, visual portrayals of human suffering.

You see quite often, in the early stages, Sick Lungs Don't Show.

I was born of Dutch parents who were strict disciplinarians. I joined the Navy at the age of 17, during World War II. To me, military discipline was an extension of the strict rules at home. I was injured in the Phillipines and honorably discharged in 1946.

When I went to work for industry, I just knew that they (like my parents) would never knowingly let me do anything that would harm me. I felt that if I worked hard and applied myself I would be rewarded and protected. Personally, I feel it would have been more merciful for me to have been killed in action while defending our Nation than to die this lingering death inflicted upon me by an industry whose right to operate (and make money), I helped to preserve.

In 1957 I went to work for what was then known as the Johns-Manville Plant in Stockton, California, It is now known as the Manville Corporation and in the future may be known as Manville #1 and Manville #2. This corporation is seeking every devious way possible to bury their money to avoid paying us, the "Manville Maimed". I worked for Johns-Manville from 1957 to 1966. We were constantly exposed to asbestos fibers throughout the entire plant.

I believe that the most serious exposure we had was whenever we did the plant clean-up, about once every six months. Now, you have to get the picture: The plant in one area is three floors high. It has steel girders and steel beamed construction over the machinery and equipment. We had to begin at the upper-most steel beams and girders with an air hose, blowing the dust from these beams - and, as we worked our way down, we would then be blowing it from the top of the machinery as it settled. Eventually (and this took days) all the dust was blown to the floor level where it was swept up and hauled away.

Management never told us asbestos dust was harmful. The only thing I knew about asbestos was the use to which it was applied.

Because of all this dust, when we left the plant, we had asbestos in our hair and on our clothing. We carried it into our automobiles, we went home, we hugged our kids and families, our wives would shake out our clothing before washing. We were the "Typhoid Marys" of our era because we walked out of the plant carrying death home with us, - along with our empty lunch buckets.

In 1977 when the time bomb of asbestos exploded within my chest, my American Dream turned into a nightmare. My income producing days had stopped. Forever!

My total life was turned upside down and inside out. I was transformed from a hard-working, proud individual to a nothing. The gloom and depression that settled upon me led to the brink of suicide - I'll never know what stopped me from taking my life that one afternoon when I had spread a plastic sheet across the bed so that after I shot myself with my gun, my blood would not soil the bedding. I had the gun to my head - my finger was on the trigger - and I was prepared when suddenly, within me, a little voice seemed to say "wait a minute". From that time on my life seemed to change. The depression remained with me for quite some time - but each day to a lessening degree.

As time progressed, I became aware of certain facts that I had not known before: Such as, that the industries knew asbestos was a killer before I was born and they didn't warn me. I also became aware of the total inadequacies of all compensation programs toward the wounded workers of our Nation and I thought this was totally wrong.

My wife and I learned, while on vacation, that I breathed much better on the coast, near the ocean, than I did at our home in Fresno, which is in the San Joaquin Valley, a farming community. I didn't have to use my portable oxygen unit quite so much there, and I could function much easier.

Ali transferred her job within the Postal Service, we sold our home and moved to the coast, leaving our family, friends and loved ones behind for a totally strange area, in the hopes we could buy me a little more time for living.

All during this period of time I was being dragged through the lengthy procedures required by our Workers Compensation system. My income had stopped - I was dependent on disability. The hospital bills went on, paid for, over the years, by me wife's income and my disability. We were forced to pay over $11,000.00 in medical bills because the insurance companies had cut me off, saying it was an occupational injury.

In comparison, I am one of the lucky ones. I was recently given a hospital bill - 18 feet long, which totals over $36,000. The bill, incurred by an AVA member, was for 42 days of care. This was the 14th time he has been hospitalized.

I had worked for a living, I provided for my own needs and the needs of my family. I contributed to the social programs of our community. I paid taxes so our State and Federal Government could function. I have not been one of the free-loaders at either end of our societies financial structure.

Consequently, I firmly believe that when a person is disabled because of their employment - they should be compensated immediately and adequately. Unfortunately, this is not the case. In fact, our State and National compensation systems are nothing but a sad, sick joke!

I filed for workers compensation in October 1977. In 1980, part of my case was finally settled, - my net award was $8,932.50. The Court also awarded me rehabilitation benefits, which Manville refuses to pay.

The State of California views asbestosis as a temporary disability. This means that every five years I must go through the humiliating and demoralizing experience of re-qualifying for compensation. If, during the five years my asbestosis goes into temporary remission, that will end forever all possibilities of any future claims. Should I become physically worse in the 6th year, I would have no recourse.

I consider an amputated arm a "temporary disability". The person can be fitted with a prosthesis and rehabilitated for gainful employment.

But for us there is no hope. Asbestosis is not reversible and becomes progressively worse as time goes on; there is no way we will ever get better!

In California we have a law, AB 946, which was passed to enable asbestos victims to receive compensation during their lengthy litigation. After one year of operation for AB 946, only 8 cases had been processed, paying an average of $2,437.50 each. A total of $12,000.00 was spent on medical examinations, and a total of $125,000.00 was spent for salaries and administrative costs.

For asbestos victims, dealing with the compensation and social security systems is like trying to punch smoke. It would be enough to drive a healthy person crazy, but trying to deal with this incessant petty harassment when your body and your life are falling apart at the same time drive many of us over the brink, to suicide.

Throughout the entire United States the asbestos victim is treated with contempt. We are made to feel like the criminal, - instead of the victim.

Our dilemma is summed up by an article written by Mark Reutter for The Nation, March 15, 1980 with the following quote from a Labor Department Official: "What it really comes down to", referring to the disabled American workers, "Is that nobody wants these people. They can't work, they aren't organized. They don't even pay union dues".

It's a frightening thing to be told you have asbestos lung disease - that nothing can be done - that it becomes progressively worse - it's irreversible - and you cannot get honest answers to simple basic questions.

For many, many years, we asbestos victims have been dying all over our country, one at a time, in poverty, no headlines, alone....

The obvious answer to isolation is organization, - Asbestos Victims of America is the result.

I realized AVA needed a non-profit classification, like the Cancer Society. An attorney wanted $750.00 to prepare the papers - but I didn't have $750.00. He said that would be O.K., he'd be on the Board of Directors, and would take the fee out of the lawsuits. Well, I told him to shove it where the sun don't shine! Then a lady attorney offered to prepare the papers free of charge, and when the papers were completed, I called the California Secretary of State. I told the lady that "I have to obtain non-profit papers in a hurry". I was told "I'm sorry, since Prop. 13 it takes six to nine months". I said "I can't wait that long" - she said, "That's the way it is". So Sunday night I slept in front of Secretary of State, March Fong Eu's office in Sacramento, in my little camper, and Monday morning when that office opened, I had my oxygen mask around my neck, I had my black bag with the oxygen hose hanging out of it in one hand, and my corporation papers in the other. I walked in and plopped the papers and black bag on the counter, the lady came in, her jaw dropped open - I said, "Look, Sis, if I collapse, plug that hose into here, turn that knob and, if I don't come to in five minutes, I'm in a heap of trouble - call the Paramedics". I was out of there in twenty minutes, and AVA was a non-profit corporation. That's the way it's been. Desperate needs require desperate measures.

But now we must face the truth, that very sad truth. The actual, stark reality facing all Americans whose occupation has been the very cause of their crippling, disabling injuries.

We must accept the truth that the dilemma facing the wounded workers of America's work force has been a football tossed about by many sectors of power and money. Their goal? To enhance their personal gains of power and money.

For me, developing AVA has been an education the average American could never obtain in any seminar or school of learning.

Who can we trust? Can we trust the medical profession? Many doctors of today cannot diagnose asbestosis from athletes foot. We are required to visit doctors who have never seen us before, and yet, after spending five minutes with us, they will write a 45 page report on our entire physical condition, minimizing the effect of our injury, which, of course, reduces the compensation that we ultimately receive. These doctors are appointed by the Insurance Companies, the State and/or the Industries. They are no more healing doctors than I am. In fact, the majority of them have nothing between their ears but dollar signs, and their hearts have turned into cash registers! But we're required to see these people, by law.

Can we trust the Industries? We know that, morally, the Manville Corporation has been bankrupt for years. This so-called "Legal Bankruptcy" just puts all of us in "limbo". Last year, they spent millions of dollars advertising that "Manville's new world is full of promise". Yet, we, the "Manville Maimed", fail to see any promise in the lethal legacy they left behind in their old world!

If I commit murder, the Courts will deal with me. If I kill ten or fifteen people, I may be sent to a mental institution. Therefore, it is totally inconceivable to me that an Industry responsible for the death of thousands and thousands of Americans can file for bankruptcy to escape punishment for their crimes.

Manville lied to the Federal Government, and asbestos was put into ships and Federal buildings. Manville lied to the States, and asbestos was put into State buildings and schools. Manville lied to the contractors, and asbestos was put into homes, factories and other buildings.

All branches of Government and society have employees who will develop asbestos-caused diseases. Who will have to pay? Not Manville. It will be the U.S. Postal Service, the Department of the Navy, the School districts for example as well as other segments of our Nations Employers.

The sad part of it is, the injury and deaths of millions of American workers and citizens were perpetrated in Manville's Corporate Board Rooms in the name of profit.

Can we trust the Government?

Nationally we are led by those who tell us that human needs are low priorities: Our Clean Air Act, Nations environment, Safety and Health in the work place, jobs, Social Security, justice are less urgent than new weapons systems. We are told that the only way to have peace is to prepare for total and apocalyptic war. When jobs are lost, we are told that this is "structural unemployment" as if this source of human suffering was divinely ordained and therefore incurable.

Look at the EPA. It used to be that a prostitute was a female on the street corner with a large handbag, but I think it is obvious to us all that it can also be a Governmental Agency who has prostituted themselves by selling out to the industries. The very organization which was charged with protecting the environment in which we live and within which we work, has proven to us all that we cannot trust them. And - as stated in the July 1983 Readers Digest on their article "What Really Happened at EPA", - "When Industry's Foxes were Hired to Guard the National Chicken Coop, No One - Least of all the President - Should have been Surprised at What Followed".

Look at OSHA. There was an explosion in a grain elevator in Texas, that killed 18 men and injured 22. Prior to this Administration, OSHA proposed a fine of $126,000.00 to the elevator owners - but under this Administration, that fine was reduced to $8,000.00, which amounts to $444.44 for every worker killed! Proof that the dollar value of each working person's life is considered a cheap commodity by this Administration. OSHA is being gutted. Workers are being fired because they report job safety hazards, they are losing ground in their battle for a healthy safe place to work and we can't do anything about it because those who are charged with the responsibility of administering our Federal Safety Laws are insensitive and irresponsible.

Can we trust our Legislators? We recently sent out a survey to AVA members. Question #30 was: "If you had your way, what would you like to see done about asbestos poisoning?" One member replied: "I would hold the U.S. Government, my ex-employer and others responsible who did not inform me of the health hazards; and force them to breath in asbestos. That way we would have better laws to deal with." Laws are being written which will remove the tort system not only from workers but also from the private sector whose health has been damaged and whose lives have been lost because of killers introduced into our environment, with full knowledge by the industries, in the name of profit. Other laws would ultimately shift the burden of paying for industry-caused suffering and death from those responsible on to you, me - the taxpayer.

What used to be a Government of the people, by the people and for the people, is now a Government of the Gasoline Companies, by Manufacturing Industries, for the Utility Companies.

Who made this Nation great? Did the industries make it great? Absolutely not, it was you and I, the people who worked and paid our taxes, that made this Country great. In these days our rights are being taken away. Those who have expended their lives working and are now dependent upon Social Security are being threatened. The trickle down theory has trickled on down past the people deserving, those who have made this Nation great, into South America and other places where we don't belong.

To some, Money is Power, and Power is Everything! I am only an asbestos victim with Will-Power!

In the context of this imagery of hopelessness, powerlessness and lowly pragmatism, what, if anything, can be done?

Organized Labor and the public sector must be supportive and get behind Asbestos Victims of America. We will be the exclamation point to the demands of Safety and Health issues, as well as adequate compensation for employment injuries. We will say: "Mr. and Mrs. America, you had better listen to us, the "Wounded Workers" of this Nation. We are your uncles, we are your neighbors, we are your grandparents, and, we are credible,whereas the Industries and the Government are incredible. We demand to be compensated for our occupational injuries, we demand healthy, safe places for our workers of today and the generations to come, because in these future generations lies the future of America. We demand the right to live our lives in dignity, not poverty".

It's too late for me, it may be too late for some of you reading this today. But I have dedicated what is left of the rest of my life to preserving the lives of others. This is a labor of love for which I receive no salary whatever. However, there are two kinds of love - the tender, caressing love of a mother for her newborn child, and the fierce, ferocious, fighting love of a mother bear defending her cub.

Through AVA, the workers and victims will experience the first kind of love - the incompetents and indifferent will be subjected to the latter.

The only way we can achieve true justice is to personally accept the challenge. If we do not personally accept the challenge - then we are placing this responsibility in the hands of others. And ... in time, all our potential gains will have been irretrievably lost. We will have earned what we got ... which is nothing. Because we personally have done exactly that - nothing ...

AVA is not a one man organization. We need the support and guidance of others, if we are to achieve justice ... where there has been none. Please help us in our efforts to help others.

We must be permitted to live out our lives in dignity - not poverty.

Senator NICKLES. I appreciate your coming.

How many members does AVA have?

Mr. VERMEULEN. Not nearly as many as the statistics indicate our potential. We are over 1,500 members now, but growing every day as people learn of AVA.

Senator NICKLES. Is that concentrated primarily in your State of California or is that nationwide?

Mr. VERMEULEN. Nationwide, and also some Canada people as well. In fact, they formed an Asbestos Victims of Quebec under the same guidelines that I established this organization in California.

Senator NICKLES. You said that in your case you settled for a certain amount, about $9,000?

Mr. VERMEULEN. That was the award determined by the charts in the State of California as to what my life was worth, $8,932.50.

Senator NICKLES. You also mentioned that you had medical expenses of $11,000 previous to that?

Mr. VERMEULEN. Yes, sir.

Senator NICKLES. Did that award include picking up those past medical expenses?

Mr. VERMEULEN. The past medical expenses have never been paid in full. That was my workers compensation award, $8,932.50, for 5 years. Now, I am going back again to reopen my case to see if they will extend another $8,932.50 for me for the next 5 years, or whatever it is they come up with.

Senator NICKLES. And part of that award was not picking up your past medical expenses?

Mr. VERMEULEN. No, sir. But after this award, and over the years, payments toward my past medical expenses periodically dribbled in. I estimate that the total reimbursement at approximately $7,000.

Senator NICKLES. Under California law it is necessary to be reviewed every 5 years?

Mr. VERMEULEN. Yes, sir.

Senator NICKLES. If there were improvements in your condition to the point that they felt like you no longer had asbestosis, would you lose that compensation?

Mr. VERMEULEN. See, the only way that can happen, Senator, is if they get a sharper lawyer or if by a stroke of the pen Governor Deukmejian or President Reagan cures 50 percent of all of the asbestos diseases in the United States, such as they did with the black lung situation. That is the only way we can ever get better.

Senator NICKLES. You are referring to some of the changes that were made in the Black Lung program?

Mr. VERMEULEN. Precisely, and also in the Social Security Program. We had people dying of mesothelioma who were pronounced fit and able to go to work by Social Security, and they are subsequently dead now.

Senator NICKLES. Do you think the changes we made in the Black Lung Program were bad changes?

Mr. VERMEULEN. I understand they are. I understand you have tightened up the qualifications, and I would hate to be examined by one of these turkeys who was here today. I will tell you one thing. Some of today's "doctors" are merely a stamped USDA approved industry whore. I would never permit him to examine me.

We are required to see these doctors, Senator. It is beneath the dignity of the average working individual to have to see people like this, but by law, we have to be examined by them.

Senator **Nickles**. I think some of our panelists are noted experts, and Mr. Jones of the American Lung Association said that many of the claims which are filed were specious. Would you agree with that, or do you think that every person who has ever filed a claim had a legitimate asbestos-related disease?

Mr. **Vermeulen**. Well, sir, the people that I am in contact with personally, that I have met, from all over the Nation who are suffering from asbestos diseases, there is no doubt in my mind that they are sick. I am not aware, and I would not be surprised that there are people that would abuse whatever they can for any purpose.

I am not a medical expert. I cannot speak for every claim in the United States, but maybe Mr. O'Reilly has something to shed on that.

Senator **Nickles**. We are interested in trying to help those that need help, but not trying to assist those who want to get into a system and hope they might get some compensation regardless of whether or not they have suffered an injury?

Mr. **Vermeulen**. I agree with you completely, I know what I am dying from. There is no question about it. X rays by two doctors missed it in me. The first doctor was a general practitioner. I can forgive him for that, but when he retired, I went to the County Board of Medical Directors and I said, "I would like to have a heart and lung doctor because I am getting a little older." So they acquainted me with a doctor who was taking on new patients. Now, this fellow was an internal specialist. He had more degrees than a thermometer, and a part of becoming his patient, we had to take an x ray. My wife and I both went to him, and let me tell you this story because it is hard to believe, but it happened.

I got back in the office that afternoon, and my boss said, "Get to the hospital right away. The doctor has got a room for you."

I said, "What the heck is the matter?"

He said, "I do not know, but go ahead."

I went there. The doctor said, "I do not like the looks of your chest x ray." He was an M.D. FCCP, specialist. So he says, "I want to take them here under my own controlled circumstances." So we did that the next day, and a couple of weeks later I got to thinking, I wonder what happened with those x rays, and I called up the doctor, and he says, "Well, they are just abnormal. How do you feel?"

I said, "I feel fine," and with that he dismissed it, and it was not until a couple of years later that I really became desperately ill and almost died when the time bomb exploded, but he never recognized asbestosis, and he is a trained chest specialist.

So you have the medical profession, as well, that are ignorant of this disease.

Senator **Nickles**. Let me follow through on that train of thought. I disagree with you concerning some of the changes we made in black lung. We had a bipartisan group who felt like we needed to make some of those reforms and were trying to improve the system. I will just give you a little quick history on black lung. We estimated the cost of the program to be about $70 million. This year we are looking at approximately $1.7 billion. In many cases, as I think Dr. Wheeler or someone else mentioned, they reviewed 100 cases of pneumoconiosis and found zero. There was a lot of abuse in that system.

There are many individuals who do have an asbestos-related disease. We want to help get through this redtape and help those individuals, possibly like yourselves, get assistance. Those who try and abuse the system or those in the field who specialize in abusing the system, in my opinion, are hurting the very people they are trying to help.

Mr. VERMEULEN. Exactly, but I would appreciate one thing. Could we concentrate on people like me first and weed out the phonay claimants later on because I think you will be weeding out a lot of the incompetent medical profession along with the phony asbestos disease claims. I think you have a lot more problems to deal with than the few people who may think they have an asbestos disease because it has to be justified and verified by the medical profession.

Senator NICKLES. Were you diagnosed as having asbestosis?

Mr. VERMEULEN. Yes, sir.

Senator NICKLES. In 1977?

Mr. VERMEULEN. Yes, sir.

Senator NICKLES. Were you still employed at that time?

Mr. VERMEULEN. Yes; I was.

Senator NICKLES. By Manville?

Mr. VERMEULEN. No, sir, I was working for a company selling fire extinguishers and things of that nature.

Senator NICKLES. Your employment with Manville ceased when?

Mr. VERMEULEN. In 1966. I worked there for 9 years, sir.

Senator NICKLES. In California?

Mr. VERMEULEN. Yes.

Senator NICKLES. In an asbestos-related type environment.

Mr. VERMEULEN. Yes; this particular plant manufactured concrete asbestos pipe that carries a lot of the drinking water throughout our Nation today.

Senator NICKLES. Senator Riegle.

Senator RIEGLE. It is not exactly a happy thought to imagine the drinking water going through the asbestos pipe, is it?

Mr. VERMEULEN. No, sir. There are also some studies showing a considerable amount of cancers developing from ingested asbestos fibers. The city and county of Santa Cruz, CA became the first city and county in the United States to adopt a total asbestos ban. They will not buy any products containing asbestos. They will use substitute materials, even if the substitutes cost more money.

We have got to put a stop to this killer, and then as concerned Americans work together to clean the lethal legacy left behind by the industry in their greed for profit.

Senator RIEGLE. I thought your point about concentrating first on the people who have the disease and who are dying from it, is an important one. Trying to respond to their problem, which is a real health and financial problem, ought to be the first priority. Then we should concentrate on whomever it is that may be trying to take advantage of the system in some way or another. It may include those in the medical profession, because as you say, in order for people to qualify, they have got to have a medical certification stating that they have this problem. So as you know, if claimants are really beating the system, they are not beating it by themselves. They are beating it with the help of somebody else who is a professional, who has made a mistake innocently or willingly.

It reminds me a little bit of our failure as a Nation to do anything about increasing the pensions of World War I veterans. Since Congress keeps dragging its feet as the World War I veterans keep dying off, eventually we will not have to act because there will not be any World War I veterans left. It seems to me that there is something of the same kind of foot-shuffling operation that goes on here, not just with respect to this specific problem, but also with social security disability.

Well, the Reagan administration behaved so outrageously in that area that the Federal courts finally came after them. Now with an election coming down the track, the President has decided 3 years later that, well, we will not just keep throwing people off of social security disability without having to prove medically that their condition has changed for the better. So he has done a 180 now, but in the meantime, many of the people who were thrown off of the rolls have died. Some of them have committed suicide. There are some very prominent cases of suicide in my State, of people who were thrown off the social security disability rolls and who were so sick at the time that they were not even able to stand the stress of going to take the test to prove that they were as sick as they were.

In one case the man was told he had to take a stress test, and the doctor says, "If I give you a stress test, you will die in the middle of the stress test." That is the kind of craziness we have seen in this sort of war on the cheaters of the system.

It seems to me that the victims who are out there, of which you are one in one area, have been lost in the shuffle.

Mr. VERMEULEN. Yes, sir, we have.

Senator RIEGLE. When you have to testify to this committee that you received the $8,700 and whatever, 50 cents, for a 5-year period, and received no reimbursement for the medical bills, it is a tragedy. That is hardly a very generous response to the nature of the problem with which you and the other 1,500 members find yourselves afflicted.

I think it would be helpful if you told us what it is like.

Mr. VERMEULEN. To die of an asbestos lung disease?

Senator RIEGLE. Yes; tell us what you have both experienced and what you have seen in others who have died of this. What actually is involved here? Let's try to understand it as fully as we can.

Mr. VERMEULEN. All right. I had always been a hard-working individual, Senator. I served honorably in the Navy in the Second World War. I joined the Navy when I was 17, as a matter of fact. I was hit in the Philippines and discharged as a disabled American vet at the age of 19, and I had hopes of building a life for myself when I went to work for industry.

You see, I was brought up in a strict Dutch home. My parents migrated here from Holland when they were small children with their parents. I was taught to speak with two words: yes, sir; no, sir; please; and thank you. They were very strict disciplinarians, and if I did not do that, I caught it alongside of my head.

When I went to school, if I did not behave, the teachers there, too, I caught it from the teachers and also my parents. Consequently, I had no problems in the service because I figured the Navy viewed me that, if I behaved myself and fought and did this and that and the other thing. They would not let me get hurt, but you see, we were in a shooting war, Senator.

But I never realized that I was safer in that all out shooting war, laying my life on the line, than I was coming back to work in American industry whose right to operate and make money I fought to help to preserve.

When I went to work for industry, I just knew that they, like the teacher, like my parents, would not let anything happen to me if I worked hard and applied myself, and unfortunately I learned this to my dismay. I was totally wrong.

I had a job that I really enjoyed. I loved doing my work, and it was involved with safety equipment and things of that nature. It was a profession, and I was very prompt, and I was very efficient, and if I did not have the honest answer to your question if you were a corporate safety director, I would get it for you. I was recognized for my ability, my eagerness to serve, and I had a good thing going for me. I felt good at the end of the day. I felt very good about my employer. The relationship was such that it was a happy union until I retired. It was, but I did not expect to retire in this manner.

All of a sudden, overnight my life was upside down and inside out. It could have been a beautiful day, and I would not have noticed. The flowers could have been blooming, and I could not have smelled them. I have never known such utter depths of depression in my life. Everything I had worked for, gone.

My wife did not understand what was happening to me because at that time I did not need this silly thing [indicating]. So what is left? Nothing.

I put a plastic sheet on my bed in our bedroom, and I sat on the edge of our bed, and I had my .22 in my hand, my pistol, and I aimed it at this temple figuring that if it was going to be an open casket funeral, they could fix the hole without too much problem, and if I sat this way and the bullet went out the other side, it would go out the window. It is a lot easier to fix a window, put in a piece of glass, than it is to repanel the wall, and I was ready because there was nothing left, and I was squeezing that trigger, when suddenly—and I do not know to this day what happened. I think it was God talking to me—I said, wait just a minute, and that is all it took. I slackened the pressure of my finger on the trigger, and I sat there for a long time.

Eventually I laid the gun down. I do not remember doing it, but I folded up the plastic paper. I put the gun away. Now, things did not clear for me the next day or the next few days. I do not recall. It took a long time before I was able to enjoy the flowers and the trees and the birds, but we learned by a trip to the Pacific Ocean that I breathed and functioned much better there than we did at my home in Fresno, in the San Joaquin Valley. I did not have to use that little hand-held oxygen unit so much, and my complexion came back, and so we sold everything. We left our family, we left our friends, we left our home, and we moved over to the Pacific Ocean for the moist air quality, hopefully to buy me a little more time, and I proceeded to accumulate fishing poles and things of this nature because I had low-grade, afternoon fevers that would hit me at maybe 2 o'clock in the afternoon or 4 o'clock, or any other time as I progressively became worse, I became less and less dependable.

I even tried to get a job. I studied for the real estate exam, and I passed it, but who would hire a real estate person if you were sick in bed and could not get up and show a house? My dependability was gone. This really hurt. I thought about selling used cars, but nobody could depend on me.

So I existed with this, and then I learned that the industries knew that asbestos was a killer before I was born and they had not told me. I also learned that nobody cared about us, the wounded workers of our Nation, and as Mark Reutter wrote for an article for the Nation magazine in March 1980, quoting a Labor Department official who stated, "The trouble is," referring to the disabled American workers, "that nobody wants these people. They don't work. They aren't organized. They don't even pay union dues."

And I thought: "Wait a minute. That man is right, but this is wrong. We are the backbone of this Nation, us who work for a living and out of our weekly, semiweekly or monthly paychecks, right off the top comes the taxes that makes our country function."

Who made this Nation great? Was it Exxon, who in spite of their multibillion dollar profits each year, paying no income tax whatever? Is it the multimillionaires with their money in the banks and their money here and there, and in spite of their tremendous wealth and accumulating wealth pay no taxes whatever year after year?

Hell, no; they did not make this Nation great. It was you and me, the people who by the sweat of our brow and also by our lives, paying the taxes, week after week, month after month, year after year, enabled this Nation to become the Nation it is. I considered us to be a part of America's family, and now we have a President in office with his "trickle-down" theory, and the trickle-down finances of this Nation is trickling right on down past the wounded workers who have made this Nation great, past the social security recipients who have spent all of their lives working to make this Nation great, on into South America and places we do not belong.

Has that individual left the human race?

And you wonder why I say any compensation law has to have a tort system? It is because the stroke of a pen or the whim of a political figure, these systems set up, even though you and I would work together diligently and get something beneficial set up, somewhere along the line we will get a less humane President who will destroy it, if that is possible.

Does that make sense?

Senator **Riegle**. I understand what you are saying.

Mr. **Vermeulen**. Now, to die from this is not pleasant. One of the first things that went by the wayside in my personal life is relationships with my wife as a normal husband. Senator, when you are gasping for breath at the slightest exertion, you cannot perform in the true marriage sense of the word. That was removed from me; that pleasure, that privilege, that closeness of association with my wife was completely removed from me in 1977. She is suffering also, because we love each other very much.

Senator RIEGLE. Well, I appreciate what you have said, and I appreciate the feeling with which you have said it. I have some other questions that I would like you to respond to for the record so that we do not take the time now since we have other witnesses.

But I appreciate your coming. I appreciate what you have said. I appreciate your leadership.

Mr. VERMEULEN. Thank you, sir.

Senator RIEGLE. Your words are not falling on deaf ears.

Mr. VERMEULEN. I hope not, but so be it. I will work with anyone toward a solution in any way that I possibly can. I really mean that.

Senator NICKLES. Mr. Vermeulen, we appreciate your saying that. I also appreciate your opening comment that you hope to be part of the solution and not part of the problem.

Mr. VERMEULEN. Yes, sir.

Senator NICKLES. We in Congress many times become the latter instead of the former. We are particularly trying in this instance to be part of the solution instead of the problem. Your appearance before this committee today has been most important, and we are very appreciative.

Mr. O'Reilly, you had just a brief comment that you wanted to make.

Mr. O'REILLY. Yes, sir. Thank you very much, Mr. Chairman. It was in response to what Dr. Wheeler said in a question that the chairman asked about the unmeritorious cases. The Rand reports, the one for last year by the Institute for Civil Justice, in addition to the executive summary that came out in April 1984 of this year, and the recent one that was just published entitled "Designing Safer Products" by the Institute for Civil Justice of the Rand Corp., they disclose that in the asbestos litigation up until the day Manville filed its bankruptcy, there were only 4 percent of the claims where the defendants believed there was no injury. The vast majority of the claims, 96 percent, the defendants themselves recognized that there was an injury to the claimant.

The report also discloses that the people who did not receive any compensation in the tort system for asbestos injuries predominated among the 4 percent, so that there were a very few people, according to the Rand Corp.'s statistics, which is quite lengthy and quite extensive, very few meritorious cases receiving no money and very few cases that were nonmeritorious received any money.

According to the Rand Corp. reports, the two I mentioned, in addition to the one on designing safer products, the tort system is working very effectively and efficiently in getting money to asbestos victims, and it is the only system that can be contemplated that will get money to the asbestos victims.

The one abuse of the tort system insofar as compensating asbestos victims is concerned is the money spent by the companies and the insurance industry on defense cost to make the litigation costly, frustrating, and time consuming for the victims. That is where the focus should be. I do not think this committee could come up with a system that would ensure that the victims of asbestos exposure or any other occupationally induced disease could recover fair and reasonable compensation such as the tort system provides, and the two Rand reports that I mentioned, the cost of asbestos litigation by Mr. Kakalik, who is here today, Ms. Ebener [phonetic], Mr. Foustener [phonetic], and Mr. Stanley in 1983 disclose, in addition to the executive summary of April 1984, that the tort system does get reasonable, fair compensation to the victims. The one problem is the enormous amount of money, I think almost $600 million, that went to industry's side in defending those claims.

Whether more of that should go to the victims or whether that cost should be cut, and I believe the experience since August 26, 1982, the dark day that Manville ran into bankruptcy court to avoid its liability, has shown that with the reluctant Manville out of the litigation the cases are even moving quicker and they are getting more reasonable settlement to the victims.

Senator **Nickles**. Mr. O'Reilly, I want to wrap it up. For the record, you need to identify yourself.

Mr. **O'Reilly**. Yes. Charles O'Reilly and Mr. Rosenberg on behalf of the Asbestos Victims of America.

Senator **Nickles**. Are you the attorney for Asbestos Victims of America or are you the attorney for Mr. Vermeulen?

Mr. **Vermeulen**. Attorney for the Asbestos Victims of America, sir, here at the request of Mr. Vermeulen.

Senator **Nickles**. You were not his personal attorney?

Mr. **O'Reilly**. Oh, no, sir. We do not feel that he needs any personal attorney in front of this august committee, and I do not think he does either.

Senator **Nickles**. He handled himself quite well. Thank you, gentlemen, very much for your comments.

Mr. **Vermeulen**. Thank you, sir.

Senator **Nickles**. Our next panelist is Frederick Baron from Dallas, TX.

Mr. Baron, welcome, and please proceed.

STATEMENT OF FREDERICK M. BARON, BARON & ASSOCIATES

Mr. **Baron**. Thank you, Senator, and I will attempt to be very brief.

Senator **Nickles**. Thank you.

Mr. **Baron**. My name is Frederick M. Baron, and I am an attorney licensed to practice law in the State of Texas. I have been admitted in numerous Federal courts throughout the country, including the U.S. Supreme Court.

My law firm, Baron & Associates, is headquartered in Dallas, TX, and we have a branch here in Washington. I have recently served as a member of the section 301(e) Superfund Study Commission which investigated the adequacy of statutory and common law remedies available to victims of hazardous chemicals.

I am the immediate past chairman of the environmental law section of the Association of Trial Lawyers of America, and the author of a legal textbook entitled "Handling Occupational Disease Cases."

My law firm limits its practice entirely to representation of victims who have been injured by exposure to toxic chemicals.

As the Senator notes, I have turned in a written statement, and I will not further refer to some excerpts that I would request that the statement along with the attachment, which is the final report with recommendations of the Judicial Administration Working Group on Asbestos Litigation of the National Center for State Courts be entered into the record, along with my testimony.

Senator NICKLES. We will have your written testimony entered into the record in full.

Mr. BARON. Thank you, sir.

There has been a tremendous amount of publicity about asbestos litigation, and it has been called a grave national problem. However, I believe, having been a participant in this grave national problem for the last 10 years, that there has been a substantial misconception about the scope and the intensity of the problem.

The first thing I would like to discuss is the scope of the problem. It should be noted that over the past 10 years that I have been involved in this litigation, there have been about 24,000 claims filed. Eighty-five percent of those claims have been filed in the State of California, in Philadelphia, in Boston, in the Mississippi gulf coast area, and in the Texas Gulf Coast area. Only 15 percent of the claims have been filed elsewhere. So we are not really dealing with a national problem, as such, in terms of the scope of the litigation.

Most of these claims involve shipyard locales. Moreover, there has been, in my opinion, a gross overstatement about the effect that these claims have had on the judicial system. Over 10 years now have passed, and we have seen 24,000 claims. Each year approximately 50,000 individuals are killed in automobile accidents and hundreds of thousands more are injured in vehicle accidents. Yet we do not consider automobile tort claims that are filed in the hundreds of thousands each year to be a situation that overwhelms the judicial system. Five thousand asbestos claims centered in five areas certainly should not overwhelm the judicial system.

Ordinarily in an area such as asbestos-related toxic tort litigation, new legal concepts of medical causation and shared liability cause the courts to react slowly in sorting out respective responsibilities. The opposite has been the case in asbestos litigation.

I first got involved in 1973, representing a group of asbestos workers in Tyler, TX. I decided at that time to do the most extensive research I could on the body of common law that was available to rely on for these interesting and unique issues of causation, statute of limitations, joint and several liabilities, and the other serious legal questions involved.

I found that up through 1973 there had been only two reported decisions in the United States involving these issues, one involving a case of silicosis in 1962, and the 1973 decision of the fifth circuit in *Borel* v. *Fiberboard,* the first asbestos case.

Yet now, today, 10 years later, if you punch any of these questions into your Westlaw or Lexis machine, it will literally go "tilt." Every judicial circuit in the United States has now issued a ruling on one or more of the complex legal issues that surround asbestos and toxic tort litigation.

Moreover, the supreme courts of many of the States have ruled on these issues, as well. When I was serving on the Superfund Study Commission, we did a study to determine how many State courts have had to deal with the issue of latent injuries and fashion a discovery rule statute of limitations in occupational disease cases, and we found that there was reported precedent in 44 of the 50 jurisdictions. Again, none of these issues had even been thought about, let alone decided, by 1973.

So I believe that the common law system, which normally reacts very slowly, has reacted rapidly to this situation.

The real problem here, which was essentially unidentified by the Rand report, is that too much money is being spent on the litigation strategies of the asbestos companies. I would like to get into that in much greater detail so that the committee can understand why the problem exists, not just the fact that there is a problem.

The Asbestos Litigation Group is a group that has as members approximately 150 lawyers who represent about 90 percent of the claims that have been filed in the judicial system for asbestos victims. I recently did a survey of our members to determine what really was happening.

As you are aware, the Rand Institute reported that the average asbestos victim, up to August 1982 received as a net payment approximately $35,000. Moreover, they found that 37 percent of each dollar paid by the asbestos companies and their insurers was being spent on defense costs, 26 on prosecution costs, and only 37 cents of each dollar went to the claimant.

We were unable to come up with any figures as to the actual cost of defense because we did not have access to those figures. The insurance carriers would not cooperate with us, nor would the asbestos companies. Thus, we accepted as valid the Rand report study indicating that the amount paid to defend each case amounted to approximately 58 percent of the total compensation being awarded.

Now, of course, defense costs are something that can be as flexible as the defendant wants. If they want to spend $1 million defending a $10,000 claim, they certainly have the ability to do that.

As far as the cost incurred to the plaintiff, we were able to fix that at an average cost of 36 percent of the dollars paid to each claimant. That would be an average of a 34 percent contingent fee contract, plus an additional 2 percent that would be the legal costs involved. Rand found that figure to be 39 percent. So we are only three points different on that.

The greatest difference though was in our survey's finding that the average total compensation paid to each victim, as an average—and I say an average because it varies wildly—was approximately $125,000. Using our figures, we find that the average total compensation paid is $125,000, and the average net to victim, after deducting the plaintiff's attorney's fees of 34 percent and the cost of the litigation of 2 percent would be $80,000.

Moreover, using those figures and using that 58 percent factor that the Rand Institute utilized, we found then that if we accept Rand's figures, the total amount that it is costing each defendant is $197,500 to deliver $80,000 to the victim. Needless to say, that is absurd.

However, as this chart indicates, the reason that it is absurd is because of the extremely high level of defense costs being paid by the asbestos companies themselves and by their insurance carriers.

Let's examine the reason why that figure is so high because that is another thing that Rand did not do, and I would like to comment on it very briefly. The reason that the figure is so high is because in each case, each asbestos case, we are finding that there are 15 and maybe 20 asbestos companies involved as defendants. Each of those asbestos companies is hiring its own set of lawyers. A simple understanding of multiplication would tell us that if you have 15 to 20 lawyers defending each individual case, the defense costs are going to be astronomical.

Rand did break that figure down. They found that the average defense cost by each defendant was approximately $2,500, but when you multiplied it times 15 or 20, you then reached an astronomical cost. This condition has been caused by the fact that the asbestos companies are litigating with their insurance carriers over who will pay the claims, and because they do not want to find themselves in a bad faith situation, they feel it is necessary for each one of them, independently and individually, to retain their own counsel and vigorously defend each claim.

I am pleased to advise this committee, as I have noted in my statement, that apparently after 18 months of very rigorous and time consuming negotiation, the asbestos industry has reached a general settlement with the insurance industry. As reported in the April 9 issue of "Business Insurance," which I have attached to my statement, there will be a central asbestos claims facility set up, and hopefully that will occur within the next few months, where all of the asbestos companies and their carriers will pool their resources so that the amount of money being spent will go to the claimant, not to the defense lawyers and not to the litigation costs.

If, in fact, the Rand figures are correct, under this set of circumstances, the amount of compensation that would be available additionally would be in the range of about $60,000 to $70,000 per claim. The "industry" would maintain about a $70,000 savings from this scenario for each individual case that will go toward insuring adequate funds will be available for all claimants, past, present, and future.

Moreover, because there would be no court costs involved with this claims facility, I am sure that the amount of attorney's fees being charged by plaintiff's counsel would be reduced, and certainly the amount of transactional costs and court costs would be substantially reduced.

I believe that the tort system has two functions, as I was taught in law school. No. 1 obviously is to compensate victims, but No. 2 is to deter negligent acts. Dean Keaton, Dean Prosser, and all of the great legal scholars go into detail about how the tort law was set up to deter and in reality fulfills this goal.

I suggest to this committee that you only need to look at the decision of the U.S. Court of Appeals for the Fifth Circuit a few weeks ago refusing to uphold the emergency standard that OSHA set for asbestos and determine, just based on that one decision, how effective OSHA has been. I suggest to you that but for this litigation, we would still be able to go down to the neighborhood hardware store and buy asbestos insulation, and I submit to you that Manville would still be in the asbestos business, selling millions of tons of this hazardous material each year.

The tort system in this area has deterred this type of conduct, and I believe it must be maintained so it can deter this type of conduct in other areas.

Thank you.

[The prepared statement of Mr. Baron, with attachment, follows:]

STATEMENT OF FREDERICK M. BARON*
ON
ASBESTOS LITIGATION
BEFORE
SENATE SUBCOMMITTEE ON LABOR
SENATE LABOR AND HUMAN RESOURCES COMMITTEE
APRIL 24, 1984

My name is Frederick M. Baron and I am an attorney licensed to practice law in the State of Texas and admitted in numerous federal courts throughout the country including the United States Supreme Court. My firm, Baron & Associates, is headquartered in Dallas, Texas and we have a branch office here in Washington, D. C. I recently served as a member of the Section 301(e) Super Fund Study Commission which investigated the adequacy of statutory and common law remedies available to victims of hazardous chemicals. I am the immediate past chairman of the Environmental Law Section of the Association of Trial Lawyers of America and the author of a legal textbook entitled "Handling Occupational Disease Cases" (Law Press 1981). My law firm limits its practice entirely to representation of victims that have been injured by exposure to toxic chemicals.

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Although there has been a tremendous amount of publicity about the plight of toxic exposure victims, the so-called "flooding" of the court system, and the problems of proof associated with toxic tort cases, I believe that many of the true facts about what has transpired in this area are not completely understood by the public. Moreover, I believe, as did the other members of the Super Fund Study Commission, that the common law tort system, which historically reacts entirely too slowly, has evolved rapidly and responsibly in dealing with the unique problems of adequately compensating victims of toxic chemicals. Recent developments upon which I will comment later signal a new pathway for the resolution of these complex issues.

To properly understand the issues involved, a brief history of toxic tort litigation is in order. I will focus on asbestos litigation, which has been the centerpiece of the controversy because of its shear size and impact on the traditional tort system. I will not dwell on the obvious - that tens of thousands of victims have suffered because the asbestos industry historically dealt with only business expediency and negligently (and in some instances wilfully and wantonly) overlooked the consequences of its act. It need only be stated that the bulk of our current information about asbestos and asbestos disease was well known to the asbestos industry by 1935. Astonishingly, to this date, some of the most reliable sources of information about asbestos hazards may be found in the 1938 volume of the I.L.O. Encyclopedia of Health and a 1930 issue of the United States

Public Health Journal.

As recently reported by the Rand Institute, asbestos tort cases have been filed at the rate of approximately 5,000 cases per year for the past four years and have often taken several years and many "cost" dollars to conclude. Unreported by the Rand Institute is the primary reason for the delays and dollars spent. Virtually every other organization studying the matter, including the National Conference on State Courts, has found that the underlying insurance disputes surrounding this new genre of tort litigation have been the primary cause of the problem. This issue needs to be explored.

In a typical asbestos claim, the victim alleges that he has been exposed to asbestos products produced by as many as twenty (20) manufacturing concerns over a long period of time and that the cumulative effect of his many years of exposure has been the development of asbestosis or an asbestos-related cancer. Inevitably, these twenty (20) asbestos manufacturers are joined as defendants in each case. Upon receiving suit papers, each defendant has, in the past, attempted to turn over the defense of each case to its respective insurance carriers. Unfortunately, because the great majority of the carriers have refused to accept responsibility in defending these claims, or have defended under reservation of rights agreements, neither the asbestos companies nor their carriers have taken any meaningful steps to expeditiously resolve underlying claims. Their concern (either real or perceived) is the possible prejudice to their legal positions in any subsequently filed insurance litigation.

For instance, the insurance carriers and asbestos manufacturers have been unsure as to what triggers the duty to defend and indemnify under the language of their insuring policies. Particularly, there has been uncertainty and a lack of legal precedent concerning what constitutes the relevant "occurrence" under any given policy - Is the pivitol occurrence the exposure to asbestos products, the manifestation of an asbestos disease, or the discovery and diagnosis of the disease process? The ability of the asbestos victim to resolve his underlying claims without protracted and costly litigation has been totally frustrated and virtually non-existent because of this unresolved tension between the manufacturer and its insurance carrier. Moreover, uncertainty has caused a lack of uniformity in the manner in which these claims have been treated across the country.

I am pleased to advise this Committee that after years of industry-wide negotiations, this barrier appears to have been broken. As related in the attached article, (Business Insurance, April 9, 1984) there has been a settlement between the asbestos industry and their insurance carriers which should provide a practical basis upon which to resolve asbestos claims before they are filed, and which will also provide a centralized claim facility as an alternative to expensive litigation. Although it must be noted that this settlement is merely tentative and that the claims facility is not yet in operation, if the resolution does become a reality, it will serve as a model for handling similar toxic tort problems as they arise through the conventional tort system.

Moreover, the ability of courts to deal with "mass tort litigation" has been questioned over the past several years, and rightfully so, because of the length of time and cost to the public of resolving these complex claims. I have presented to Committee counsel the "final report" of the judicial administration working group on asbestos litigation of the National Center for State Courts which was published this month as a joint effort of numerous insurance carriers, trial lawyers, judges and interested parties. This document outlines, in great detail, procedures that are available to courts under current law, in most jurisdictions, to handle this type of litigation in a much more expeditious, time and cost efficient manner. I believe that this document will go a long way towards relieving what has been perceived as a log jam in our court system.[1]

Yet when we really look at this log jam in the courts we see that there are hundreds of thousands of automobile related claims filed each year across the country, and that a claims filing rate of 5,000 cases a year in asbestos litigation should not destroy the system. It is merely the fact that asbestos litigation is the first of its kind involving issues of toxic torts. It is the flushing out of new legal concepts such as joint and several liability, latent causation and "discovery rule" statute of limitations that has created some delays. Yet over the five (5) years in which this litigation has been pending, the courts have reacted dramatically in dealing with these questions and we now have guiding instructions from the appellate courts in most every jurisdiction.

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[1] It should be noted that asbestos litigation is not really a "national" problem. Eighty-five percent (85%) of all pending litigation is located in the "shipyard" locales: California, Philadelphia, Boston and the Texas and Mississippi gulf areas.

I firmly believe that the future, with a central claims handling facility and with increased use of innovative procedures for handling these claims in the courts, will prove that the traditional tort goals of compensating victims and deterring improper conduct will be fulfilled. In this latter respect, I would merely note for the Committee that as of this writing, the OSHA emergency standard on asbestos has still not been implemented. But for the large number of asbestos-related tort cases, the use of asbestos in the work places and market places of America would today be at the same level it was ten (10) years ago, before the litigation began.

Finally, I would like to comment on some of the statements contained within the Rand Institute report that I believe reflect very serious inaccuracies. I should note that when the Rand Institute originally began its study, approximately 120 plaintiffs lawyers were asked to participate. Letters were sent to these individuals giving lists of claims from which information was to be obtained. Among these plaintiffs lawyers, 74% declined to participate. The vast majority of these lawyers refused to provide information because they felt that the claims that had been selected for study were not typical, but had been selected because of their high cost to benefit ratio. Inquiries were made by myself and others of the Rand Institute as to where they had received their sampling data, but we were told that the information was confidential and would not be disclosed. As a result, only a very small percentage of the plaintiffs' lawyers contacted participated in the study. Moreover, those who did participate generally were from firms that have not taken an active role in this litigation.

I do not dispute the Rand report results indicating the high cost of defending asbestos claims. Because of the underlying insurance litigation, which is apparently now over, the cost of preparing a defense for twenty (20) defendants to each claim must be enormous. As this was being handled by twenty (20) separate law firms in each case, a basic understanding of multiplication would reveal the astronomical costs to the industry. As to the costs incurred by plaintiffs, asbestos cases are usually handled on a contingent fee that normally is in the range of 33% to 40% plus costs. Rand found that the cost to the victim in their sampling was approximately 39% (fee plus costs) of the benefit recovered. This is identical to other types of product liability litigation or automobile litigation, and although our internal poll of asbestos lawyers indicated that the percentage (fee plus costs) was closer to 36%, I cannot quarrel with Rand's findings in this regard.

I can take major issue, however, with their findings that the average amount paid to victims is in the range of $60,000.00.

After reviewing some background data utilized by Rand, I found that 35% of the claims that they studied were filed on behalf of a "factory worker" with an average settlement value of $24,000 per case. Moreover, I found that almost all of the cases utilized in the sampling came from one lawyer in New Jersey who had settled a large of number of claims for a small amount of dollars, primarily because other benefits, such as worker's compensation benefits, were available to his clients.

In reality, about 10% of all asbestos litigation involves factory workers. In most of those cases, secondary worker's compensation benefits are available to supplement the benefits received in their tort litigation. When you remove these cases from the Rand sample, it would then appear that even using the Rand figures, the total compensation paid to victims in the tort context is closer to $95,000 per case.

An informal survey undertaken by myself of other plaintiffs lawyers indicates that this figure is also probably low. It is the position of the Asbestos Litigation Group, an organization of approximately 150 lawyers who represent asbestos victims, that the average settlement paid to each worker is approximately $125,000. Rand's discrepancy can be better understood by reviewing their data base.

In conversations that I have had with Rand representatives, I learned that Rand did not verify that the information given to them by the defendants and insurance companies on each case showed final settlement figures as opposed to partial settlement figures. In fact, I was told by a Rand investigator that many of the cases that they reviewed had not been settled with all defendants and that they had merely estimated what they believed the remaining defendants would pay. Thus, a case involving fifteen (15) defendants might have been settled with fourteen (14) companies for $90,000 and based on that Rand took the final settlement to be approximately $95,000.

It has been the experience of most plaintiffs' counsel in this litigation that the most egregiously liable defendant is the defendant that is released last from the lawsuit. For that reason, the last settlement is usually the largest. Thus, I believe that Rand, through improper sampling methods, has artificially lowered the total settlement dollars being paid to victims. Moreover, Rand's study was done prior to the Manville bankruptcy (August, 1982) and prior to the institution of many of the reforms that have been implemented by various courts. Any student who is seriously involved in reviewing asbestos litigation is aware that the dollars paid to claimants has risen substantially since Manville Corporation has retired from the litigation. Manville's long history of obstructing the litigation process[2] resulted in the protracted, costly and lengthy nature of the litigation before their bankruptcy. We have now witnessed a dramatic rise in the number of cases that are being completed by settlement as opposed to jury trials.

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[2] Manville has been at the forefront of lobbying activity for an "Asbestos Compensation Bill" which would drastically limit their overall liability and the benefits available to victims.

In summary, it is my belief that the problems associated with the asbestos litigation were very real for the first several years of its existence. Issues of law that had never been discussed, let alone determined, were central in each of these cases. Disputes over insurance coverage involving interpretation of policy terms that were not devised for latent injury cases created havoc for the manufacturing companies whose primary business is manufacturing, not defending litigation claims. Yet responses to these problems such as those contained in the National Center for State Court's document and the Center For Public Resources task force proposals have proven that these problems can be solved and that an efficient workable system can be maintained. With the rapidly changing character of the system for resolving these claims and the willingness of all involved parties to be flexible within the traditional tort system, I believe it would be unwise, at this time, to consider a legislative restructuring of the benefit delivery mechinisms now in effect.

(Note: Due to printing limitations, the attachments accompanying Baron's statement were retained in the files of the committee.)

Senator NICKLES. Thank you very much, Mr. Baron.

A couple of questions: you came up with $125,000 as compared to Rand's figures?

Mr. BARON. Approximately $64,000 was Rand's.

Senator NICKLES. How did you get the $125,000? You are almost double what Rand had, and you just surveyed 150 of your members?

Mr. BARON. No, I did a couple of things. First of all, when I saw the Rand report, I thought, well, golly, this is really incredible. I wonder how they have reached this figure, and so I began calling them and asking them for some information.

Senator NICKLES. I will ask them how they came up with their figure. I am asking you how you came up with your figure.

Mr. BARON. How we came up with our figure? We surveyed all of the lawyers that we were aware of who were handling asbestos cases.

Senator NICKLES. You said 150 were representing 90 percent?

Mr. BARON. Approximately 90 percent of the claims.

Senator NICKLES. Ninety percent of the claims, and you mentioned 24,000 claims?

Mr. BARON. That is correct.

Senator NICKLES. 150 attorneys are handling 90 percent of the claims?

Mr. BARON. Well, the way it works in asbestos litigation is that most of the claims are originated by a local attorney, maybe a union lawyer. He files the claims, but will then usually associate another firm that has had some experience in handling these cases because of their complex nature. That associated firm does not do the day-to-day work on the case, but when there are questions involved in terms of policy or procedure in the handling of the case, that second firm is consulted.

When I say they are handling 90 percent of the cases, I am talking about firms that do this association type of work. They are handling the cases along with other law firms. There are over 1,000 law firms that presently represent asbestos victims.

Senator NICKLES. This has been a bonanza for you and those 150 firms for the last several years, hasn't it?

Mr. BARON. It has been an extremely trying, difficult, and time-consuming situation. In fact, many lawyers have dropped out of the asbestos litigation because, as you will note, the average attorney's fee in an asbestos case is almost identical to what it is in an automobile case, and many lawyers have found that automobile cases are more cost/fee productive than asbestos cases.

Senator NICKLES. I have a hard time seeing how that would be when I see the millions of dollars of claims which have been paid and then see 150 attorneys who are represented by the asbestos litigation group; is that correct?

Mr. BARON. Well, they are not represented. The asbestos litigation group is a nonprofit organization which attempts to provide information to lawyers so that they can better represent their clients in this area.

Senator NICKLES. Since this is so financially punitive to you and your firm, would you be interested in supplying this committee information on what you have received or your firm has received in litigation fees over the past few years in asbestos-related claims?

Mr. Baron. If the committee is also interested in our overhead, I would be delighted to supply both figures. I think the committee would be absolutely astounded, and let me explain to you the reason why, Senator. If our firm was representing 500 or 600 victims, which we do, and if we were receiving one-third of what they receive and that was all there was involved, it would be a very simple matter. However, ordinarily in these cases there are three, four, and five sets of law firms representing each individual plaintiff. The attorney's fees are split up among those four, five, or six different sets of law firms that represent the plaintiff. Most of these cases do not settle until the day before trial because of the tremendous defense that is put forward by the asbestos companies. The normal transaction time here has been around 3 years. Rand found it was 2 years, 8 months from filing date to resolution.

The amount of costs involved which are advanced by the plaintiff's lawyers in handling each case is astronomical. No one is providing us with costs to go out and do medical testing of the plaintiff. No one is providing us with costs to prepare depositions. Because these cases have been defended so vigorously and with such enormous wealth, we have had to do everything possible to keep this thing going. Certainly every law firm, of necessity, is in business to make money, but we like to think that we are providing a public service to these people because no one else will do it.

Senator Nickles. I might tell you that I am concerned when I see either one of these charts.

Mr. Baron. I am, too. I am, too, very gravely concerned.

Senator Nickles. We have many people who have need of compensation. Yet we see the attorneys walking away with the cash and the victims walking away with very little.

Mr. Baron. Well, let's examine that. Which attorneys are walking away with the cash? If you accept Rand's figures, it looks to me like the defense lawyers are making about twice and often far more than that compared to what the plaintiff's lawyers are making. The plaintiff's bar represents these people on a contingent fee that is fixed. The defense costs are not.

Senator Nickles. You mentioned 34 percent. Where does the 22 and the 26 percent come from?

Mr. Baron. The way this chart was set up is, in my opinion, meaningless. I was given a blank chart before the hearing to fill in our figures which divides up the total dollars paid but this is very meaningless. Let me explain to you why.

What we are talking about here is a system where the plaintiff's costs are fixed. If the plaintiff receives $10,000, the attorney is going to receive 33, 34 percent of it, depending upon the amount of cost or the contingent fee arrangement. Yet the defendant's costs are not fixed. They will vary with whatever the defendant wants to do. If the defendant wants to spend $10 million defending a $10,000 claim, the defense bar will receive those funds.

Senator Nickles. Let me circle back to that. You are showing an average payment of $80,000 compared to $35,000; total compensation, $125,000 to $60,000.

Mr. Baron. Right.

Senator **Nickles**. I asked you previously how you came up with those two figures.

Mr. **Baron**. All right. Two ways. No. 1, we surveyed our people. The real difference——

Senator **Nickles**. You surveyed those 150?

Mr. **Baron**. Yes. The real difference though, Senator, is that the Rand report includes a group of workers that we did not include. They have utilized three categories of plaintiffs.

Senator **Nickles**. Is your survey broader than theirs?

Mr. **Baron**. Theirs is broader because they have included a category of worker that we believe should not be included in this type of a study, and that is the factory worker. The factory worker cases in their study made up 35 percent of the number of cases that were studied, and their average compensation——

Senator **Nickles**. Why would you exclude the factory workers?

Mr. **Baron**. A factory worker is a worker like Mr. Vermeulen who works for Johns Manville and who files a negligence case against Johns Manville after having received workers compensation. The types of cases that represent 89 percent of all asbestos litigation are people who are suing Johns Manville, and 10, 15, or 20 other companies, as a result of using asbestos products. They are product liability claims. Mr. Vermeulen's claim is a negligence claim, not a product liability claim. It involves 1 defendant, not 20 defendants.

Senator **Nickles**. The big bucks are in product liability, not in workers compensation?

Mr. **Baron**. The number of defendants, the legal theories involved and usually the severity of the injury is tremendously different, and therefore, you really cannot compare the two types of claims, and if you remove those 35 percent factory workers from Rand, then you come up with a figure that is very close to ours.

So I do not think our figures are really far apart. We have just studied a different group.

Senator **Nickles**. Your figures are far apart. We are trying to figure out, what data base was different, because obviously there are some differences.

Mr. **Baron**. There is a second difference, and that is because we included claims settled after 1982, which they did not. I think they will readily agree that the amount of money that is being paid now, since we have favorable legal precedent from the appellate courts, is far more substantial than it was in the early years of the litigation.

Senator **Nickles**. Do you have a breakdown of the amount of compensation received per disease and what type of disease?

Mr. **Baron**. No; I do not, but what we were told was that the Rand study was probably accurate on the breakdown, with the exception of lung cancer cases, and that the lung cancer cases, we felt, were low, But I do not have any substantiating information on that. We did not break it down.

Senator **Nickles**. Again, you are trying to refute the Rand study example and you are not really coming up with the facts to support it.

Mr. **Baron**. Well, quite honestly, there is really not that much difference. Rand studied three things. They studied the defense costs. We did not study that, and we are using their figures. We have no way to refute that.

They studied the plaintiff's costs. Their plaintiff's cost was 39 percent of what the victim received. Our calculation was 36 percent of what the victim received. We are 3 percentage points off, which is insignificant in this type of a study.

The third thing, where we differ, is on the total amount paid to the claimant and his attorney. Rand included factory workers. We did not include factory workers. That is the difference. That really accounts for about 95 percent of the difference.

Senator NICKLES. Do you mainly handle single plaintiff suits or a larger group?

Mr. BARON. In asbestos litigation, we believe, as do most of the firms, that the only way to prosecute these cases is on an individual basis because each claimant's case is different.

Another significant differance that I did not point out earlier is that 45 percent of Rand's figures were on class suits or group suits, which we believe probably are not representative of the great number of cases in this litigation.

Senator NICKLES. What type of time is involved between filing a claim and the plaintiff receiving a check?

Mr. BARON. It varies widely from jurisdiction to jurisdiction. In Dallas, TX, where the courts have adopted the recommendations of the National Conference on State Courts, we can file a lawsuit and have it concluded easily within 12 months. In Chicago, where it takes 5 years to handle an automobile accident to conclusion, it takes 5 to 6 years to handle an asbestos case to conclusion.

Senator NICKLES. Are most of the settlements made in lump sum?

Mr. BARON. Some settlements are made in lump sums. Usually the smaller ones are made in lump sums. Ordinarily we try to do structured settlements in the larger cases, depending upon the circumstances of the victim.

Senator NICKLES. Structured settlements are in the form of an initial lump sum and an annuity?

Mr. BARON. An initial lump sum and an annuity payout. As you are well aware, Congress passed a law a few years ago that exempts structured settlements from taxation, and they can provide substantial benefit to our claimants as they will receive monthly payments rather than one lump sum at the beginning. Also, many of these people are not sophisticated investors, and we find it is a good way for them to be able to prolong the award of benefits that they receive.

Senator NICKLES. Are the plaintiff's attorney's fees received in the form of lump sum fees even if there is an annuity that is paid out?

Mr. BARON. Yes, usually they are, A present value of the annuity is determined by the insurance company that is doing the structure, and the attorney's fee is calculated on the contract, whether it be one-third or 25 percent or whatever, of the present value of the amount paid.

Senator NICKLES. In many cases, if there is a sizable settlement, a plaintiff may receive a substantial amount of money up front, but more than likely would receive an annuity. His attorney would possibly receive their entire settlement, lump sum, up front.

Mr. BARON. Based on the present value, again, of the settlement. The client will oftentimes receive 10 to 15 times more money, but it is paid out over a period of time. The attorney will receive a percentage of the present value of the annuity.

Senator NICKLES. In your view, are asbestos victims properly served by the current tort system?

Mr. BARON. Probably they will be. Many are now, although there are still exceptions. I certainly do not think they have been in the past. This was a nightmare. The last 5 years of this litigation have been an absolute nightmare because of the lack of guiding principles we have had in the law. The appellate courts had never decided these issues. This was something that was really and truly unique. However, I believe that the public, who have been protected from further asbestos exposures by virtue of this litigation, has been well served

Senator NICKLES. What do you project for the next 5 years?

Mr. BARON. If what I am reading about in Business Insurance magazine, in the Wall Street Journal and other places comes true, I believe that we will have the major problem solved, and that is a central claims facility.

I would like to point out another important factor here. I recently talked with a representative of a major insurance company. He told me that during the calendar year 1982, they had 1 million claims filed against them. Nine hundred and ten thousand of those claims were settled or concluded without a lawsuit being filed. Of the 90,000 where lawsuits were filed, 85,000 of them were settled prior to trial, and they only tried 5,000 cases.

In asbestos litigation, every single claim that comes in my office is a litigation claim because there has been historically no place to go to settle it without litigation. Reading these articles, there is now an agreement among these asbestos companies that they will have a pre-filing termination process where we can go to a central claims facility, give them the medical information, and resolve the claim without filing suit.

That is going to mean that the legal defense costs will drop off to nothing. The plaintiff's costs will be far substantially reduced, and the amount of money that is getting paid to the victim will be quicker and probably more substantial. So I believe the future in this area is bright.

It just takes time. This is the first area where this type of an explosion of litigation has occurred. The courts have to react to it.

Senator NICKLES. Are you a director or trustee of the Asbestos Litigation Group?

Mr. BARON. Yes; I am a trustee.

Senator NICKLES. And this is a voluntary, nonprofit group?

Mr. BARON. Let me explain its origin, Senator. In 1977 I found that there were four or five other lawyers in the United States that were handling asbestos cases, and we decided to spend a weekend in New Orleans talking about our common problems. We did that, and we decided that we should get together the next year to discuss all of the discovery that we had done in these cases and try to pool our resources because we were being overwhelmed by the asbestos companies. That is all the Asbestos Litigation Group is. It is not an incorporated association. It is a loose-knit organization for sharing information to save on the transactional costs of this litigation.

Senator NICKLES. Did you provide any information to the Rand group?

Mr. BARON. Two years ago the Rand Group sent me a letter requesting information about seven lawsuits that I was handling that they said had been finally concluded and that they wanted information on. At that time my office had concluded about 350 cases, and if I was to pick out the 15 lowest settlements, those seven cases would have been included in the 15 lowest settlements.

Moreover, three of those cases were not totally concluded. They were still open cases. I wrote the Rand Institute a letter stating these facts and asked them how they had gotten together these particular cases, and would they please let me know where their data base was coming from.

I received a call back from someone who told me that their data base was confidential, but that these cases were representative samples. I then contacted other plaintiff's lawyers and found that they had the exact same experience with the Rand "sample." The cases that they were being asked to report on were low settlement cases and cases that were not closed. So generally as a group we decided not to participate unless they gave us access to their data base.

I was asked, and I refused for that reason.

Senator NICKLES. Your firm or the Asbestos Litigation Group?

Mr. BARON. Yes.

Senator NICKLES. Do they also handle litigation in, say, black lung?

Mr. BARON. Well, the Asbestos Litigation Group does no litigation whatsoever.

Senator NICKLES. I mean your firm.

Mr. BARON. No; our firm only handles third party occupational disease cases, not work compensation or black lung cases. We do radiation litigation. We do lead smelter litigation. We have done a tremendous amount of pesticide litigation. We do hazardous waste litigation. We do asbestos litigation, anything involving hazardous chemicals or exposures. That is the only type of practice that we have, and I think we may well be the largest firm in the country that does that.

Senator NICKLES. You are speaking about your firm?

Mr. BARON. My firm.

Senator NICKLES. Are many firms who are members of the Asbestos Litigation Group, also active in the black lung program?

Mr. BARON. Not really. Most of them are traditional tort firms, such as Mr. O'Reilly's firm, who testified here before me. His firm in Los Angeles has traditionally handled product liability claims, generally. They just happen to have clients that they are representing that have these problems, and they got interested in trying to help them. That is why the need for this group, to provide them and other lawyers information on how to deal with asbestos claims.

Senator NICKLES. Mr. Baron, you mentioned your work in dealing with hazardous chemicals and the Superfund.

Mr. BARON. Yes.

Senator NICKLES. There has been some legislation considered by Congress which would set up a compensation schedule, scheme.

Mr. BARON. That was the 301(e) study group that I participated in and I was an author of the proposal.

Senator NICKLES. That is what I was trying to get at. You were an author of the proposal which would set up a compensation schedule for persons presumably injured due to their relationship dealing with hazardous chemicals?

Mr. BARON. Senator Nickles, it is a two-tier system. The first level would be a system of Workers Compensation benefits and the second tier would be an exit to the tort system that would provide an unlimited common law recovery, but that the tort recovery would pay back whatever benefits were paid under the compensation system. That's almost identical to the system that is now in place for worker related injuries in most States.

It is my belief, and it always has been my belief, that these asbestos cases really should have started as workers compensation cases against employers, and that system should provide the first level of benefits. Unfortunately many State compensation laws have fallen through the cracks on occupational disease claims. The anomaly is highlighted by the case involving a fellow who worked in the shipyard in New Jersey in 1949 and who quit in 1950, developed mesothelioma in 1982, filed a comp claim against his employer, and was awarded benefits at the rate of $11 a week, which was the benefit rate in 1950. There have been too many historical problems with the State workers compensation system as it has attemped to deal with latent injury cases.

I believe that those laws should be reformed, but I believe that the tort system which deters conduct that causes disease and which permits the worker to stand up for his own rights in court should be maintained.

Senator NICKLES. I did not want to digress. I just wanted to make sure. I felt from your earlier comments that you were active in that legislation.

Mr. BARON. I am.

Senator NICKLES. But I wanted to make sure. Thank you very much for your presentation before the committee today.

Mr. BARON. Thank you, Senator.

Senator NICKLES. Our next and final panelist, is Dr. James Kakalik, senior policy analyst for the Rand Corp. from Santa Monica.

Mr. Kakalik, welcome, and thank you for your presentation.

Please proceed.

STATEMENT OF JAMES S. KAKALIK, PH.D., SENIOR POLICY ANALYST, THE RAND CORP.'S INSTITUTE FOR CIVIL JUSTICE

Dr. KAKALIK. Thank you. I appreciate being invited.

Let me briefly summarize what our research to date has found. First of all, we found that approximately $1 billion has been spent in compensation and litigation expenses as of the end of 1982 on the more than 24,000 open and closed asbestos product liability claims.

The potential future cost in compensation of terminating the rest of these claims certainly runs into the billions of dollars. These costs are a major concern to many people, and hence, the Rand Corporation's Institute for Civil Justice, which is a nonprofit research organization, conducted an impartial and independent study to find out what the facts really are and to try to replace rhetoric with some basic, hard data.

In our first report on this study, we analyzed that $1 billion in aggregate compensation and expenses that had been paid through the end of 1982. As your chart shows, what we found was that the injured parties received 37 percent of the total amount expended by defendants and insurers after deduction of defense and plaintiff's litigation expenses.

That aggregate data base was augmented in our second report on the study in which we used a different approach. We took a survey of expenses and compensation paid on a nationwide, representative random sample of individual claims. These were claims that were closed by all or nearly all defendants prior to August 1982. The average results per claim, using the aggregate data and the sample data, were essentially the same. Using the aggregate data, we found average compensation was $60,000. Using the sample data, we found $64,000.

The percent the injured parties received using the aggregate data was 37 percent. Using the sample data, it was essentially the same, 39 percent.

We also found that the compensation paid to injured parties varied widely, as several people have already noted. The type of injury was certainly a major influence on the amount of compensation paid. People with lung cancer or mesothelioma received substantially more than those with asbestosis.

For asbestosis claimants, the average compensation varied sharply among worker categories. If you consider an average aged claimant who had named the average number of defendants in a single-plaintiff lawsuit, a factory worker with asbestosis received an average of $55,000 in compensation; a shipyard worker, $75,000; and an insulation worker, $106,000.

For mesothelioma, all other things being equal, the average payment was $319,000 in total compensation.

Claims involving death received an average of 88 percent of what they would have received had they not involved death and had all other factors about the claim been the same.

We found approximately a 5-percent growth rate in compensation from year to year.

There were certain other factors, other than the type of injury, that had a significant impact on the compensation. For example, whether or not a claim went to trial was highly significant. All other factors being equal, tried claims received more than twice the compensation of settled claims. The compensation increased as the number of defendants named on the lawsuit increased, and the compensation was markedly lower for group lawsuits than it was for single plaintiff lawsuits.

When we added all of the money on a per claim basis, we found that all defendants and their insurers combined paid a total of about $101,000 for the average closed claim. After we deducted the legal expenses on both sides, the plaintiff received an average net compensation of $39,000, or 39 percent of the $101,000 total spent by defendants and insurers. Thus the plaintiffs received 39 cents on the dollar. Litigation and other related expenses consumed 61 cents on the dollar.

We believe that the heart of the asbestos litigation problem, from a policy standpoint, is its huge scale. Much human suffering is involved. Tens of thousands of claims, current and future, have been and will be filed, and they are clearly going to be worth billions of dollars. The sheer numbers stretch the ability of some of the courts where they are concentrated to handle the claims. They threaten the economic survival of some of the defendants, and ultimately those facts threaten the ability of the injured parties to receive fair compensation.

Because the problem is immense and because it may influence public reactions to other health and legal problems coming down the road, many different responses have been proposed. Several generic lines of reform have been suggested by various people ranging from increasing the efficiency with which the courts handle these cases to establishing a joint claims facility outside the courts where negotiation could take place with a single representative of a group of defendants rather than having each defendant represented by their own counsel. Arbitration has been suggested, and finally, perhaps a Government-mandated compensation system.

We did not make any recommendations in this study, but we do believe that any rational course of action must be based on facts such as those we have developed.

[The prepared statement of Mr. Kakalik, with attachment and reponses to questions submitted by Senator Nickles, follows:]

Testimony Presented April 24, 1984,
before the Subcommittee on Labor of the
Committee on Labor and Human Resources of the
United States Senate

by

James S. Kakalik, Ph.D.
Senior Policy Analyst
at
The Rand Corporation's
Institute for Civil Justice

ASBESTOS LITIGATION COMPENSATION AND EXPENSES[1]

Asbestos-related disease and consequent litigation involve enormous personal and economic stakes: About $1 billion in compensation and litigation expenses had been spent by the end of 1982 on more than 20,000 open and closed asbestos product liability claims. Many times that number of people have been exposed to asbestos, and the potential liability of the defendant firms runs into the billions of dollars.

These costs are a major concern to the claimants, the defendants, their insurers, and the public. Hence, The Rand Corporation's Institute for Civil Justice, a nonprofit research organization, has conducted an impartial, independent, and objective study of asbestos litigation compensation and expenses.

The asbestos calamity may be unique in scale and intensity, or it may be the forerunner of a wave of environmentally based injury claims of unprecedented dimensions. In either case, it is important that policymakers know how much is being spent to deal with it, and for what, and how these costs vary with claim characteristics. This study measures the costs of asbestos claims closed through August 1982. It does not attempt to predict future costs.

In our first report on this study, we analyzed the $1 billion in aggregate compensation and expenses for all open and closed claims combined through 1982.

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[1] The views and conclusions expressed are those of the author and should not be interpreted as representing those of The Rand Corporation or any of the agencies sponsoring its research.

That aggregate knowledge base is augmented in our second report by the results of a survey of expenses and compensation paid on individual claims that were tried, settled, or dismissed between January 1980 and August 1982; the claims in the survey include all tried claims and a nationally representative random sample of claims closed by all or nearly all defendants without trial during that time period. The average results per claim using the aggregate data and the sample claim data are essentially the same.

I submit the executive summary of our second report for the record. We had detailed data on 14 of the 16 defendants who are named on at least half of all claims filed and pay three-fourths of the compensation. We also had data on 27 other defendants who are named on less than half the claims. We made estimates for compensation paid by other defendants. In addition, 34 plaintiffs' lawyers provided information. Thus, we had information sufficient to allow us to make reasonably accurate estimates of total compensation and expenses.

When we combine claims tried and claims closed before trial, the average compensation paid between January 1, 1980, and August 26, 1982, was $64,000.

However, we also found that compensation per claim varied widely. The type of injury was a major influence on the amount of compensation paid. Claimants with lung cancer or mesothelioma received substantially more than those with asbestosis. For asbestosis, the average compensation differed sharply among worker types.

Consider a claimant of average age (57 years), who had named the average number of defendants (15) in a single-plaintiff lawsuit that was settled before trial in 1982. If such a claimant was an asbestos-related factory worker with asbestosis, he or she received an estimated average of $55,000 in compensation; if a shipyard worker with asbestosis, $75,000; if an insulation worker with asbestosis, $106,000; if any type of worker with lung cancer, $119,000; and if a worker of any type with mesothelioma, $319,000. All other things being equal, claims involving death received only 88 percent of what they would have received had they not involved death. The average compensation per claim rose at the rate of 5 percent per year from 1980 through 1982.

These averages must be adjusted if the claim characteristics differ from those specified. Factors other than the type of injury had a significant impact on the amount of compensation received. First, whether or not trial began for a given claim was highly significant. All other factors being equal, a claim that began trial received over twice the compensation of a similar claim that was settled before trial. Second, the peak compensation went to people 54 years old. All other factors being equal, older (over 75) and younger (under 40) claimants are estimated to have received only about three-fourths or less of what the average 57-year-old claimant received. Third, compensation per claim tended to increase with the number of defendants on the claim: Claims with more defendants than average resulted in an increase in compensation of up to 15 percent. And fourth, compensation per claim tended to decrease as the number of plaintiffs in a single lawsuit increased: The largest multiple-plaintiff lawsuits resulted in compensation per plaintiff that was about 70 percent of the compensation for a comparable single-plaintiff lawsuit.

For all claims closed by any method, the average legal fees and expenses were $25,000 on the plaintiff's side (39 percent of total compensation) and $37,000 on the defendant's side (58 percent of what they paid in total compensation).

All defendants and insurers combined paid a total of $101,000 for the average closed claim, including both total compensation paid and defense legal fees and expenses. After deducting legal fees and expenses incurred by both sides, the plaintiff received an average net compensation of $39,000 or 39 percent of the $101,000 total.

Thus, the plaintiffs received 39 cents in net compensation per dollar spent by defendants and insurers; defendants' and plaintiffs' legal expenses consumed 61 cents per dollar.

In summary, the heart of the asbestos litigation problem is its huge scale. Much human suffering is involved. Tens of thousands of current and future injury claims are worth billions of dollars. The sheer numbers stretch the ability of some courts to handle the claims, threaten the economic survival of some defendants, and ultimately threaten the ability of the injured parties to receive fair compensation.

Because the asbestos problem is immense and because it may influence public reactions to other major health and legal problems, many different responses have been proposed. Several generic lines of reform have been suggested by various people: increased coordination and efficiencies within the existing tort system; establishment of a joint claims facility for settlement negotiation without filing a lawsuit; arbitration; and government-mandated compensation systems.

We did not make recommendations in our study, but we believe that any rational course of action must be based on facts such as those we have developed.

R-3132-ICJ

Variation in Asbestos Litigation Compensation and Expenses

EXECUTIVE SUMMARY

James S. Kakalik, Patricia A. Ebener,
William L.F. Felstiner, Gus Haggstrom, Michael G. Shanley

April 1984

This is a prepublication copy of an executive summary of a forthcoming report. It is not for public release until after Congressional testimony, scheduled for 2 p.m., Tuesday, April 24, 1984. Copies of the typeset printed report will be available from The Rand Corporation in the near future.

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THE
INSTITUTE FOR
CIVIL JUSTICE

FOREWORD

As I wrote in the Foreword to the preceding volume of the Institute's study of asbestos litigation, the resolution of disputes regarding asbestos-related diseases has become one of the critical problems facing the American civil justice system. Indeed, given the suffering and death involved and the fact that such diseases may be the harbinger of an emerging class of substance-related diseases, the problem becomes one of major importance to our entire society.

Knowledge of causation, incentives to prevention, methods of treatment, and the awarding of compensation are key issues surrounding this class of diseases. The issues of how much (if any) and how efficiently compensation is awarded are a crucial test of our society's ability to resolve the aftermath of this kind of disease. But they are not the only test. We also must understand the extent to which the existing compensation scheme deters behavior that jeopardizes the public health.

The resolution of disputes regarding compensation for asbestos-related diseases is now testing the ability of our civil justice system in both these dimensions. In those cases in which causal links have been established between asbestos and disease, and victims of that disease have been properly identified, does our system compensate the victims or their survivors *adequately* and *efficiently*? Does the system establish a context in which a similar catastrophe is *less likely* to occur?

The rancorous debate over the compensation question rages about us. However, until the first of the Institute's asbestos studies was published late in 1983, even the most rudimentary facts regarding the amounts of compensation awarded, the costs of awarding compensation, and the compensation that plaintiffs retain net of their legal costs were anecdotal and fragmentary or altogether unknown. Our studies in this series, aimed at informing the debate, present facts and estimates regarding this critical aspect of the problem: levels of compensation and litigation costs to plaintiffs and defendants.

I believe that no one who is involved in or concerned with the resolution of asbestos-related injury claims--whether from the point of view of plaintiff, defendant, or insurer--can be indifferent to the findings of these studies. For the first time, an independent, objective, and comprehensive assessment of the costs of resolution of such claims has been conducted and the results made available to all parties.

In the first report on this study, the authors based their analysis of the aggregate expenses of asbestos-related litigation and compensation levels on data received from defendants and insurers, and on a survey of members of the plaintiffs' bar; the authors examined the questions of the levels of compensation and of litigation expenses, who paid them, and why. The conclusions they presented are essential to the policy debate.

That aggregate knowledge base is augmented in this report by the results of a survey of expenses and compensation paid on individual claims that were tried, settled, or dismissed between January 1980 and August 1982; the claims in the survey include all tried claims and a random sample of claims closed without trial during that time period. This report investigates factors that were associated with variation in the expenses and compensation paid per claim during that time period, such as type of disease. Such information should also prove invaluable to all parties in resolving basic questions of fact and enabling constructive discussions of the adequacy of compensation, the equity or fairness of the amounts paid to claimants with different characteristics, and the degree of efficiency achieved by our civil justice system.

Looking beyond the current situation, I remain convinced that information of the kind the Institute is developing in these studies also will be crucial to future debates over how disputes regarding emerging classes of disease can best be resolved, and thereby to achieving consensus on the values appropriate to associate with *fair* compensation, *efficiently* awarded.

Gustave H. Shubert
Director, The Institute for Civil Justice

EXECUTIVE SUMMARY

Asbestos-related disease and consequent litigation involve enormous personal and economic stakes: About $1 billion in compensation and litigation expenses had been spent by the end of 1982 on more than 20,000 open and closed asbestos product liability claims. Many times that number of people have been exposed to asbestos, and the potential liability of the defendant firms runs into the billions of dollars. Three major corporations have already filed Chapter 11 bankruptcy petitions, identifying the costs of asbestos litigation as one of the reasons for filing. These costs (both compensation payments and litigation expenses) are a major concern to the claimants, the defendants, their insurers, and the public.

This report is the second of two that examine the money spent to resolve asbestos-related injury lawsuits. Our first report analyzed total litigation expenses and compensation paid for all open claims combined and for all closed claims combined.[1] However, aggregate data did not allow us to analyze differences in expenses and compensation among claims to see how these varied as a function of type of injury and other factors. Consequently, we conducted a detailed survey of plaintiffs' attorneys, defendants, and insurers, to collect information on a sample of claims that were closed between January 1980 and August 1982. This second report analyzes characteristics of individual claims that explain variation in compensation and expenses.

The 513 closed claims in the survey included all 132 tried claims, and a nationally representative, random sample of 381 claims closed before trial by all or nearly all defendants during that time period. The claim sampling procedures were designed and conducted entirely by Rand Corporation staff. Confidentiality agreements with all participants in the study preclude disclosure of specific sources, but we first inspected the contents of several independent defendant and insurer claims data bases. We conducted checks among these data bases and are convinced that the list of approximately 21,000 different claims in August 1982 (including about 4000 closed claims) from which we drew the random sample did not exclude any significant set of claims.

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[1] *Costs of Asbestos Litigation*, Institute for Civil Justice, The Rand Corporation, R-3042-ICJ, 1983.

This study focuses on asbestos-related product liability litigation; the study does not include costs incurred by the government, expenses and compensation in workers' compensation claims, and costs incurred in reorganization under Chapter 11 of the Federal Bankruptcy Act.

Because much has happened in asbestos litigation since 1982, this study does not attempt to project from 1982 to 1984 or to the future. The system is in transition: Future costs and compensation will depend heavily on the outcomes of the Chapter 11 bankruptcy reorganizations, and on the details of any of the proposed changes in the system of processing these claims that may be implemented. Nor does this study address such matters as the "appropriateness" or "reasonableness" of expenses, the "adequacy" of compensation levels, or "changes" in the tort litigation system. Answering these extremely important questions will require other difficult, time-consuming, and expensive research studies and extensive new information. We believe, however, that the compensation and expense data developed by this study are essential in considering the performance of the current system and any proposed alternatives.

The asbestos calamity may be unique in scale and intensity, or it may be the forerunner of a wave of environmentally based injury claims of unprecedented dimensions. In either case, it is important that policymakers know how much is being spent to deal with it, and for what, and how these costs vary with claim characteristics.

In this executive summary, we first summarize the average characteristics of asbestos claims closed in 1980-1982. Then we discuss the factors that explained the level of compensation received, the likelihood of receiving no compensation, the likelihood of a trial, and the likelihood of receiving punitive damages. Next, we present factors that influenced the level of defense and plaintiff's litigation expenses. Finally, we total the expenditures and examine the ratio between litigation expense payments and compensation (the "overhead" costs incurred in generating one dollar in payment to an injured person).

CHARACTERISTICS OF CLOSED CLAIMS

For the sample claims closed by all or nearly all defendants in the 32 months we studied, the average claimant was 57 years old, 95 percent of claimants were married, 95 percent were male, and nearly all were smokers or had been smokers at some time in their lives. Three worker classifications accounted for the vast majority of asbestos-related litigation: shipyard workers (37 percent of all closed claims); asbestos-related factory workers (35 percent); and insulation workers (21 percent). Fully 71 percent of the closed claims were filed in five states (California, Massachusetts, New Jersey, Pennsylvania, and Texas); and nationwide, just over half were filed in federal rather than state courts.

Asbestosis accounted for 76 percent of the closed claims,[2] lung cancer for 12 percent, mesothelioma for 5 percent, and all other types of injury for only 3 percent. In addition, no asbestos-related injury was manifest for 4 percent of our sample. Fifteen percent of the claims involved deceased workers.

At least 91 percent of all claims filed that were based on asbestosis, lung cancer, or mesothelioma received compensation, while only about half of the claims for other types of injuries did so. The average total compensation awarded or paid per closed claim nationwide was $54,000 for asbestosis, $83,000 for lung cancer, and $265,000 for mesothelioma. Only a small percentage of the claimants with no manifest asbestos-related injury received compensation; those few that did usually received only a few hundred dollars.

A substantial minority (42 percent) of the closed claims were parts of lawsuits filed by multiple plaintiffs instead of by or on behalf of one plaintiff.

The average time from claim filing to closure was 2 years and 8 months. About a third of the claims were closed in one year or less from filing, but 11 percent took 6 years (the longest amount of time reported for our sample of cases.)

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[2] The injury data that we obtained from four defendants and insurers included in the asbestosis category a range of disorders, such as pleural plaques and lung fibrosis, with a wide range of degree of severity. Claims were classified as "no injury" if *none* of the four classified the claimant as having an injury.

Although over 300 different defendants have been named on asbestos product liability suits, claims were concentrated on a few defendants. Sixteen corporations are named as defendants on at least half of all the suits. Another 15 or so are involved in one-fourth to one-half of the suits; hence, most defendants are involved in fewer than one-fourth of the cases. Plaintiffs on closed claims sued an average of 15 defendants.

Claims dismissed and later refiled were deleted from the sample, as were claims known to be still substantially open. To be retained in the sample, a claim had to have been closed for all or nearly all defendants. In the final sample of 513 claims, 81 percent were fully closed by all defendants. The remaining 19 percent were closed by nearly all defendants, but were known to be open with respect to an average of 1.6 defendants. Only 13 claims were open for more than two defendants, and no claim was open for more than four defendants. To avoid understating the level of compensation on this 19 percent of the claims, the amount those 1.6 defendants would have paid was estimated and included.

The settled claims that were closed with respect to nearly all defendants had slightly higher compensation than the fully closed settled claims, so including them raised the average compensation somewhat. The average compensation for the fully closed settled claims was $53,000, whereas the average for the entire sample of settled claims was $55,000. The settled claims that were closed for nearly all defendants had essentially the same distribution of types of injuries as the fully closed settled claims. However, the claims closed for nearly all defendants were more likely to be for shipyard workers and less likely to be part of a multiple-plaintiff lawsuit.

We decided to include that 19 percent in the analysis because they were known to be open for an average of only 1.6 defendants (whose compensation we estimated) and because they provided a substantial amount of actual compensation data that enriched the data base.

FACTORS THAT EXPLAINED THE LEVEL OF COMPENSATION

To identify factors that helped explain the level of compensation in 1980-1982, we began by considering total compensation (exclusive of punitive damages) as a function of all factors for which we had data. We used multivariate regression techniques to analyze all claim characteristics simultaneously, so as to see how influential each characteristic was when all other characteristics were held constant.

Our findings should be used cautiously. For one thing, we had no direct data on certain factors that we would expect to influence the level of compensation on individual claims: the severity of asbestosis, the claimant's earning power, the strength of asbestos exposure evidence, and the characteristics of the lawyers on both sides.[3] Nor do we have data on compensation paid from sources other than product liability litigation, such as workers' compensation. Compensation paid from other sources probably differs for claims with different characteristies (such as different types of workers) and may influence the amount of product liability compensation paid.

Our average compensation data should also be used cautiously in estimating compensation levels, which may change in the future in light of changes in the nature and distribution of injuries on closed cases, changes in the average number and type of defendants involved, changes in the structure of settlement negotiations, and changes resulting from the Chapter 11 bankruptcy filings by some defendants. Our estimates are based on data from a sample of cases closed before August 26, 1982. More recent and future claims compensation may differ.

As expected, the type of injury was a major influence on the amount of compensation paid. Claimants with lung cancer or mesothelioma received substantially more than those with asbestosis. For asbestosis, the average compensation differed sharply among worker types. We hypothesize that at least part of that variation was due to variation in severity of asbestosis injury which resulted from unequal exposure to asbestos among worker classifications. As a consequence, we explored the interaction of the injury and type-of-worker variables. Our discussions with defendants suggested that the asbestosis they were seeing in claims by factory workers was less severe than that of both insulation and shipyard workers. We found that, holding all other factors equal, the average compensation paid for asbestosis was highest, intermediate, and lowest for insulation workers, shipyard workers and factory workers, respectively.*

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[3] The claim characteristics that were included in the equation for estimating compensation accounted for 34 percent of the variance among individual claims. While the inclusion of some factors that were not statistically significant would have raised this figure a few percentage points, the fact remains that a substantial amount of the variability in the compensation levels among individual claims cannot be fully explained by the claim characteristics that were available for this study. However, by social science research standards, explaining 34 percent of the variance is quite respectable.

Consider a claimant of average age (57 years), who had named the average number of defendants (15) in a single-plaintiff lawsuit that was settled before trial in 1982. As shown in Table S.1, if such a claimant was an asbestos-related factory worker with asbestosis, he or she received an estimated average of $55,000 in compensation; if an

Table S.1

AVERAGE COMPENSATION PAID FOR CLAIMS RECEIVING COMPENSATION BY TYPE OF INJURY AND WORKER CLASSIFICATION IN 1982, FOR CLAIMANTS WHO WERE ALIVE, AGE 57, AND NAMED 15 DEFENDANTS ON A SINGLE PLAINTIFF LAWSUIT THAT WAS SETTLED BEFORE TRIAL

Type of Injury and Worker Classification	Average Compensation per Claim Settled Before Trial
Asbestosis	
Asbestos-related factory worker	$ 55,000
Other type of worker	58,000
Shipyard worker	75,000
Insulation worker	106,000
Lung cancer	119,000
Mesothelioma	319,000
Other type of injury	95,000

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*Note that worker classification influences compensation for a number of reasons; it should not be used in claim negotiations in lieu of medical evidence about the severity of injury.

insulation worker with asbestosis, or any type of worker with lung cancer, over $100,000; if a worker of any type with mesothelioma, $319,000.

The averages in Table S.1 must be adjusted if the claim characteristics differ from those specified. First, whether or not trial began for a given claim was highly significant in explaining the level of compensation: All other factors being equal, a claim that began trial received 2.28 times the compensation of a similar claim that was settled before trial. (This is exclusive of any punitive damages awarded at trial.) Second, all other things being equal, claims involving death received only 88 percent of what they would have received had they not involved death. Third, the average compensation per claim rose at the rate of 5 percent per year from 1980 through 1982. Fourth, the peak compensation went to people 54 years old. All other factors being equal, older (over 75) and younger (under 40) claimants are estimated to have received only about three-fourths or less of what the average 57-year-old claimant received. Fifth, compensation per claim tended to increase with the number of defendants on the claim: All other factors being equal, claims with more defendants than average resulted in a maximum increase in compensation of about 15 percent. And sixth, compensation per claim tended to decrease as the number of plaintiffs in a single lawsuit increased. All other factors being equal, the largest multiple-plaintiff lawsuits resulted in an estimated average compensation per claim that was about 70 percent of the compensation for a single-plaintiff lawsuit.

Two notable variables were not statistically significant in explaining the level of compensation: type of court (federal or state) and region of the country. We did not explore differences within states. Three variables that might affect compensation--smoking, marital status, and gender--were excluded from the analysis because of the small number of closed claims in our sample that involved females, nonsmokers, and unmarried people.

FACTORS THAT EXPLAINED ZERO COMPENSATION

Only 9 percent of the claims closed in 1980-1982 received zero compensation. Three factors were influential; the single most important one was a person's being classified as having "no injury."[*] A second important factor was the injury's being something other than asbestosis, lung cancer, and mesothelioma, the three most often associated with asbestos. For *some* of these other types of injuries, usually some other cancer or other lung disease, it may be more difficult to establish a link with exposure to asbestos. Only about half the claimants with these other types of injuries received compensation.

The asbestos-related experience of the plaintiff's lawyer was also important in helping explain whether compensation was paid. The proportion of claims that received no compensation was 23 percent for lawyers who had closed only one claim in our sample, 8 percent for lawyers who had closed 2 to 5 claims, and a mere 1 percent for lawyers who had closed more than 20.

FACTORS THAT EXPLAINED THE LIKELIHOOD OF TRIAL

Relatively few claims went to trial. Several claim characteristics were related to the likelihood of trial. Those that were statistically significant were the type of injury, the state in which the claim was filed, and the presence of a large number of plaintiffs in one lawsuit. Variables that were not significant were age, marital status, sex, life status, smoking, type of court (federal or state), number of defendants per claim, and worker classification.

Claims in our sample with no manifest asbestos-related injury *never* went to trial. When all other factors are held equal (using a logistic regression technique), mesothelioma claims were at least twice as likely to go to trial (14 percent) as claims with any other type of injury (7 percent or less).

The percentage of closed claims that were tried varied markedly from state to state. In California and New Jersey, it was 1 percent or less. The rates were much higher (8 percent and 16 percent, respectively) in two of the high-claim-volume states, Texas and Pennsylvania. Fewer claims had been closed in Missouri, but about a third of them went to trial. In the other states combined, about 6 percent began trial. Finally, claims sampled from among large lawsuits with at least 50 other plaintiffs *never* went to trial.

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[*] Injury classification data were obtained from four large defendants and insurers. Claims were classified as "no injury" if *none* of the four classified the claimant as having an injury.

FACTORS THAT EXPLAINED PUNITIVE AWARDS

Punitive damage awards appeared to be more frequent in asbestos cases than in product liability cases generally, but they were still rare. Punitive damages totaling $4,934,000 were awarded to 19 plaintiffs, involving less than 1 percent of all claims closed between January 1, 1980, and August 26, 1982. The awards ranged from $4,000 to $1,000,000, and averaged $260,000 per plaintiff who received one. Even though punitive damages were awarded in 18 percent of the asbestos trials that went to verdict, the $255,000 average total compensation for all tried claims included an average of only $37,000 in punitive damages.

The 19 plaintiffs receiving a punitive award were insufficient for us to perform a multivariate analysis, but we carefully reviewed their claims to see what characteristics might be related to the receipt of punitive damages. The only salient observation was that two-thirds of the claims that received punitive awards were in Pennsylvania; the rest were in six other states. In Pennsylvania, 34 percent of the claims that started trial between January 1, 1980, and August 26, 1982, resulted in punitive awards.

FACTORS THAT EXPLAINED DEFENSE LITIGATION EXPENSES

The total defense expense was $37,000 for the average closed claim,[6] of which allocated expenses (legal fees and related expenses) were 78 percent, unallocated expenses (claims processing and management expenses) were 19 percent, and organization-versus-organization litigation expenses (usually concerning insurance coverage) were 4 percent.

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[6] The 95 percent confidence interval for the estimated average defense expenses using the sample data ranges from $35,500 to $38,500.

Since the average closed claim involved 15 defendants and $37,000 in defense litigation expenses, the average total defense expense by *one* defendant to close a claim with one plaintiff was approximately $2,500. A smaller defendant and its insurers typically spent an average of at least $1,000 per closed claim in total expenses. Some of the larger defendants (those named on a larger percentage of the claims, who generally paid higher compensation) usually spent more than the average. Each case requires certain threshold litigation expenses; although those expenses rise with increased compensation, *they do not rise in proportion to increased compensation*. Hence, in general, the higher the average compensation paid by a defendant, the higher the expense will be, but the lower the ratio of expense to compensation.

The ratio of allocated expense to compensation paid on asbestos claims was higher than for three other tort areas: product liability generally, malpractice, and auto accidents. The auto accident area was lowest, probably because it had such a high volume of claims, most of which were closed without a lawsuit being filed. Malpractice claims had ratios higher than auto claims, but only about two-thirds as large as the asbestos ratio. Product liability claims, most comparable in subject matter to asbestos claims, had an overall ratio of 0.35--lower than the asbestos ratio of 0.45. The numerous defendants in the average asbestos claim, each with its own legal expenses, may explain much of the higher asbestos ratio when compared with that for medical malpractice and product liability generally. In the average asbestos case, responsibility for a $64,000 compensation payment was divided among 15 defendants, most of whom paid an average of less than $5,000 each. In other tort areas, the average defendant paid larger compensation, and expenses were a lower percentage of compensation, because expenses do not increase as fast as compensation payments.

We analyzed defense expenses as a function of all factors for which we had data. We used multivariate regression techniques to analyze all characteristics simultaneously, to shed light on the influence of each claim characteristic when all other characteristics were held constant.[7] Again, since our data were derived from 1980-1982, we caution readers that defense expenses for more recent and future claims may differ from these figures, especially if changes occur in the efficiency and manner of processing asbestos claims.

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[7] The claim characteristics that were included in the equation for estimating defense expenses accounted for 77 percent of the variance

As expected, the type of injury and worker category influenced the amount of defense expenses. Consider an average claimant who had named the average number of defendants (15) in a single-plaintiff lawsuit that was settled for compensation before trial in 1982. As shown in Table S.2, such claimants with mesothelioma generated the highest average defense expenses, $57,000, while such claimants with no manifest asbestos-related injury generated the lowest, an estimated $18,000 per claim.

The dollar amounts in Table S.2 must be adjusted when claim characteristics differ from those specified. First, all other things being equal, defense expenses were 13 percent greater for cases involving dead claimants than for cases with living claimants. Second, whether or not trial began for a given claim was highly significant in explaining defense expenses. All other factors being equal, a claim

Table S.2

DEFENSE EXPENSES BY TYPE OF INJURY AND WORKER CLASSIFICATION IN 1982, FOR CLAIMANTS WHO WERE ALIVE AND NAMED 15 DEFENDANTS IN A SINGLE PLAINTIFF LAWSUIT THAT WAS SETTLED BEFORE TRIAL

Type of Injury and Worker Classification	Average Defense Expenses Per Claim
Asbestosis	
Asbestos-related factory worker	$ 35,000
Other type worker	34,000
Shipyard worker	40,000
Insulation worker	49,000
Lung cancer	40,000
Mesothelioma	57,000
Other type injury	33,000
No manifest asbestos-related injury ...	18,000

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among individual claims. This percentage of explained variation is very high for research on legal behavior.

that began trial had 3.13 times the defense expenses of a claim that was settled before trial. Third, the average defense expenses per claim rose at the rate of one percent per year from 1980 through 1982. This is lower than the rate of inflation and lower than the 5 percent per year growth in levels of compensation. Perhaps defendants were becoming more efficient at processing these claims as time went on. Fourth, defense expenses per claim increased substantially with the number of defendants on the claim, because each defendant usually had its own defense lawyer and other litigation expenses. All other factors being equal, lawsuits with larger numbers of defendants than average resulted in a maximum estimated increase in defense litigation expenses of about 60 percent. Doubling the number of defendants added almost 50 percent to the total defense litigation expenses. The reason these additional defendants did not double the expenses was that the same 16 large defendants were named on at least half of all claims. Additional defendants were usually smaller defendants, who made lower average compensation payments and incurred lower defense litigation expenses. Fifth, defense expenses per plaintiff tended to decrease as the number of plaintiffs on a single lawsuit increased. All other factors being equal, the largest multiple-plaintiff lawsuits resulted in estimated defense expenses per claim that were less than two-thirds of the defense expenses for a single-plaintiff lawsuit.

Certain variables were not statistically significant: the claimant's age, sex, marital status, smoker status, whether the claim was filed in federal or state court, and region of the country.

FACTORS THAT EXPLAINED PLAINTIFF LITIGATION EXPENSES

Asbestos cases are almost always handled on a contingency fee basis by plaintiffs' lawyers (i.e., attorney fees are a percentage of total compensation). The percentage is usually increased if the claim goes to trial. The plaintiff's litigation expenses other than attorney fees generally consist of travel and stenographic expenses for depositions and trials, medical examinations, and expert witness fees.

During 1980-1982, legal fees in tried cases were typically 33 to 45 percent of total compensation; the average fee was about 39 percent. In tried cases, other expenses ranged from 1 to 12 percent of recovery, but were generally about 6 percent. Plaintiff's legal fees as a percentage of compensation were lower for settled cases; they typically ran from 28 to 40 percent, averaging 34 percent. Other expenses on settled claims averaged approximately 5 percent of recovery, though on occasion they were much higher or lower.

Thus, the estimated average plaintiff litigation expenses (including both legal fees and other expenses) amounted to 39 percent of total compensation for all 1980-1982 closed claims combined.

AVERAGES FOR TRIED CLAIMS

The average total compensation paid for the claims that began trial between January 1, 1980, and August 26, 1982, was $255,000; the median was $123,000; and the maximum was $2,300,000. These figures include compensatory damage awards, punitive damage awards, if any, and pretrial settlements paid by any defendants on the claim who elected to settle before other defendants went to trial; they do not include any changes in compensation that may result from appeals of some of the awards.[*] Considering all tried claims, 95 percent of the claimants received at least some compensation in pretrial settlement or trial award or both. The average total compensation for those who received at least some money was $269,000.

The average total compensation for the 53 percent with plaintiff's verdicts was $388,000. The 18 percent that were settled by all defendants after trial began received about half as much, an average of $189,000. Claims with defense verdicts accounted for 29 percent of the trials during this time span. In 82 percent of trials that led to defense verdicts, some defendants had settled before the trial began (paying a combined average of $62,000 per claim).

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[*] Because trial verdicts may be reduced after appeal or settled for less than the verdict, our estimate of compensation for claims that began trial overstates, to an unknown extent, the compensation actually received in this class of claims. The awards for 24 percent of the claims for which trial began are being appealed.

AVERAGES FOR CLAIMS CLOSED BEFORE TRIAL

Claims closed for all defendants before trial began accounted for 95 percent of all claims closed between January 1, 1980, and August 26, 1982. Of these claims, 91 percent received compensation that ranged up to $1,400,000, had a median of $33,000, and averaged $60,000. Total compensation for claims closed before trial began, including those with and without compensation, had a median of $27,000 and averaged $55,000.

AVERAGES FOR ALL CLOSED CLAIMS COMBINED

When we combine claims tried and claims closed before trial,[9] the average compensation paid between January 1, 1980, and August 26, 1982, was $64,000.[10]

Plaintiff's legal fees and expenses for all tried claims averaged $114,000 (for tried claims that received some compensation, the average was $120,000, or 45 percent of average total compensation). For all claims that closed before trial began, the average was $21,000 (for settled claims that received some compensation, the average was $23,000, or 38 percent of total compensation).

Defendants' legal fees and expenses for all tried claims averaged $125,000, 49 percent of what they paid in total compensation. For all claims that closed before trial began, the average was $33,000 or 60 percent of what they paid in total compensation.

For all claims closed by any method, the average legal fees and expenses were $25,000 on the plaintiff's side (39 percent of total compensation) and $37,000 on the defendant's side (58 percent of what they paid in total compensation). Plaintiff expenses rose steadily with the level of compensation because of the usual contingency fee arrangement; so did defense expenses, but not as fast. Defense expenses as a percentage of compensation declined from over 100 percent of low compensation claims to less than 20 percent of high ones.

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[9] Data were analyzed for tried claims separately from claims closed before trial. The separate results were then combined, weighted by the number of each of these two types of claims in the total universe of all closed claims (including those in and not in the sample).

[10] The 95 percent confidence interval for the estimated average compensation using the sample data ranged from $58,000 to $70,000.

For claims settled for about $150,000 or less compensation, and for tried claims that were awarded about $400,000 or less, the expenses for all defendants combined exceeded expenses for the plaintiff. For claims with larger amounts of compensation, the plaintiff averaged higher litigation expenses than those of all defendants combined.

As shown in Fig. S.1, all defendants and insurers combined paid a total of $101,000 for the average closed claim, including both total compensation paid and defense legal fees and expenses. After deducting legal fees and expenses incurred by both sides, the plaintiff received an average net compensation of $39,000 or 39 percent of the $101,000 total. The plaintiff received considerably more if the claim was tried ($141,000 after payment of all legal fees and expenses for tried claims, versus $34,000 for claims closed before trial).

These figures may be better understood by considering the total amount that defendants, insurers, and plaintiffs paid for every *one dollar* in net compensation that went to the plaintiff. For every $2.59 paid by defendants and insurers, defense litigation expenses were an estimated $0.95, plaintiff's litigation expenses were an estimated $0.64, and the plaintiff received $1.00--39 percent of the $2.59 total. That percentage increased with the level of total compensation, from less than 20 percent of the total defense pay-out for claims with low total compensation, up to 49 percent for those with average compensation over $500,000.

The extent to which the sample is representative of claims closed in the sample time period is shown when we compare the results from the sample data for 1980-1982 and the aggregate data for *all* closed claims described in our previous report. *The results using these two different research approaches are essentially the same.*[11] The average total

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[11] The first method sought aggregate data on total compensation and defense expenses through August 26, 1982, on all closed claims combined from all major defendants and insurers. A number of plaintiffs' attorneys were interviewed regarding average contingency fees and other litigation expenses. The second method sought individual claim data on compensation, defense allocated expenses, and plaintiff's expenses from all major defendants, insurers, and the plaintiffs' lawyers for a random sample of claims closed between January 1, 1980, and August 26, 1982. The two methods used different data, with the exception of defense unallocated expenses (such as for claims processing), insurance coverage litigation expenses, and plaintiff's litigation expenses.

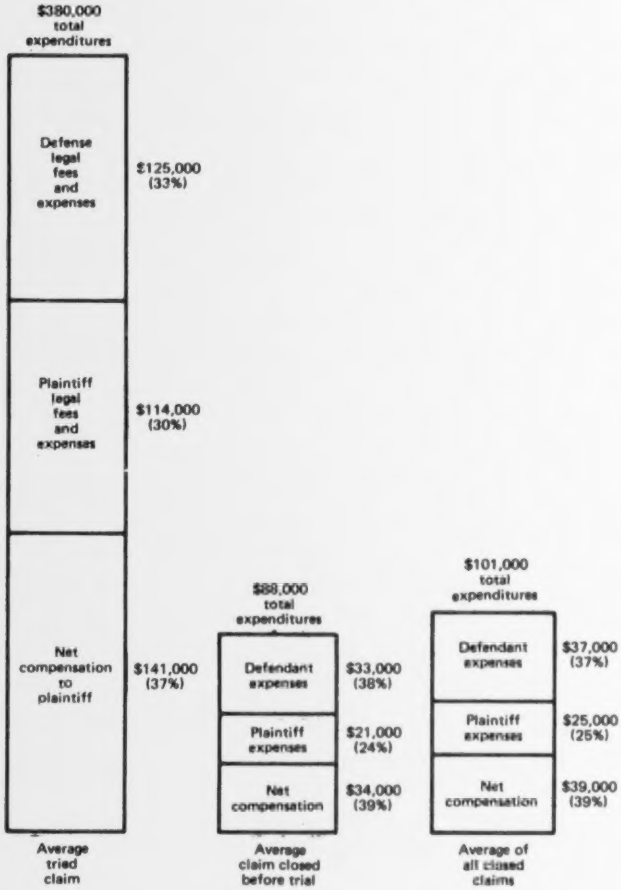

Fig. S.1 -- Average total expenditures per claim for asbestos product liability claims closed between January 1, 1980, and August 26, 1982

compensation using aggregate data was $60,000; for sample closed claim data it was $64,000. After deducting the plaintiff's expenses, the average percent of total compensation plus defense expenses that the plaintiff received was 37 percent using aggregate data and 39 percent using sample closed claim data. In addition, the distribution of other claim characteristics for the sample is very similar to the distribution of claim characteristics for the universe of all claims closed in 1980-1982.

IMPLICATIONS

In summary, the heart of the asbestos litigation problem is its huge scale. Much human suffering is involved. Tens of thousands of current and future injury claims are worth billions of dollars. The sheer numbers stretch the ability of some courts to handle the claims, threaten the economic survival of some defendants, and ultimately threaten the ability of the injured parties to receive fair compensation.

Because the asbestos problem is immense and because it may influence public reactions to other major health and legal problems, many different responses have been proposed. Several generic lines of reform have been suggested by various people: increased coordination and efficiencies within the existing tort system; establishment of a joint claims facility for settlement negotiation without filing a lawsuit; arbitration; and government-mandated compensation systems.

We believe that any rational course of action must be based on facts such as those developed by this study.

Rand News Release

THE
INSTITUTE FOR
CIVIL JUSTICE
1984

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For release upon presentation of testimony,
scheduled for 2 p.m. (EST), Tuesday, April 24

Rand Institute for Civil Justice Report:

IN ASBESTOS-RELATED CLAIMS, FACTORS OTHER THAN INJURY PLAY SIGNIFICANT ROLE IN OUTCOME, RESEARCHER TELLS SENATORS

WASHINGTON, D.C., April 24 -- How much you get when you make a claim for an asbestos-related injury depends on many other factors besides the injury itself, a researcher for The Rand Corporation's Institute for Civil Justice testified before a Senate subcommittee today.

While the more severely injured generally receive higher awards, James S. Kakalik, principal investigator for a new study, said these other factors are also statistically significant in influencing what plaintiffs get:

o The number of defendants in a single claim. Claims with more defendants than the average -- 15 -- resulted in a maximum estimated increase in compensation of about 15 percent.

o The number of plaintiffs in a single claim. The largest multiple-plaintiff lawsuits resulted in an estimated average compensation per claim that was about 70 percent of the compensation for a single-plaintiff lawsuit.

(MORE)

o Whether the claim is taken to trial. In the sample analyzed by the institute research team, cases that litigants took to court yielded verdicts 2.28 times greater than amounts received in comparable cases settled before trial -- and that is exclusive of any punitive damages.

"However," Kakalik pointed out, "claims that went to trial may differ from those settled earlier on characteristics that were not measured."

The age of the plaintiff, the type of employment in which he contracted the disease, and whether he was alive when the compensation was awarded also weighed heavily in the outcome, Kakalik said.

Noting that severity of injury is an important consideration, Kakalik pointed out that claimants with lung cancer and mesothelioma, for example, receive substantially more than those with asbestosis.

(Asbestosis is a clogging and scarring of the lungs that may produce a disabling loss of lung capacity. Mesothelioma is a rare, rapidly fatal cancer of the lining of the chest and abdomen.)

Kakalik's testimony before the Subcommittee on Labor of the Senate Committee on Labor and Human Resources was based on two reports by the civil justice institute on the costs and compensation in asbestos-related cases closed prior to August 1982.

In the latest study, of cases closed between January 1980 and August 1982, plaintiffs were found to have received an average of 39 percent of total payout by defendants, after deducting plaintiffs' and defendants' litigation expenses. Using aggregate data over a longer time span in the first study last year, the figure came to 37 percent.

(MORE)

SECOND ADD In Asbestos-Related Claims...

The new study, drawing a sharper focus on a more detailed data base, "not only reaffirms the earlier findings, but pinpoints widely varying patterns of costs and compensation," said Gustave H. Shubert, Rand senior vice president and director of the institute.

All other factors being equal, Kakalik said that:

o The peak compensation went to people 54 years old. Those over 70 are estimated to have received only 71 percent of what the average age claimant, 57, received.

o Insulation workers suffering from asbestosis averaged higher compensation in cases settled before trial ($106,000) than shipyard workers ($75,000), who were paid more than factory workers, ($55,000).

o Claimants with lung cancer received an average of $119,000 in settlement, and those with mesothelioma, $319,000.

o Claims involving death received only 88 percent of what would have been received had they not involved death.

Kakalik listed these additional findings:

o The average compensation paid on all claims, whether tried in court or settled earlier, was $64,000. Defendants' total payouts averaged $101,000, including $37,000 in defense litigation expenses plus the compensation.

o On average, for every $2.59 paid by defendants and insurers, 95 cents went to pay their litigation expenses, 64 cents went to pay plaintiff's litigation expenses, and a dollar was netted by the plaintiff in compensation.

o While more than 300 defendants have been named altogether, 16 corporations have been targeted in at least half of the claims.

(MORE)

THIRD ADD In Asbestos-Related Claims...

The new study, "Variation in Asbestos Litigation Compensation and Expenses," was prepared by Kakalik, Patricia A. Ebener, William L.F. Felstiner, Gus W. Haggstrom and Michael G. Shanley. The Institute for Civil Justice is a separate research organization within Rand supported by pooled grants from more than 200 corporations, foundations and professional organizations.

The report is based on a survey of 513 claims closed between January 1980 and August 1982, which includes all 132 claims tried and a nationally representative, random sample of 381 claims closed before trial with all or nearly all defendants.

"The system is in transition," the report says, noting that the study does not project from 1982 to now or into the future. "Future costs and compensation will depend heavily on the outcomes of...bankruptcy reorganizations, and on the details of any of the proposed changes in the system of processing these claims that may be implemented."

In a foreword, institute director Shubert points out that until its first study was published, even the most rudimentary facts about asbestos litigation were fragmentary, anecdotal or altogether unknown.

Now, for the first time, he writes, "an independent, objective and comprehensive assessment of the costs of resolution of such claims has been conducted and the results made available to all parties."

The institute's first report was based on aggregate information provided by defendants and their insurers from the thousands of suits filed since the floodgates of asbestos litigation were opened in 1973. Defendants and insurance companies poured out an estimated $1 billion over the decade.

(MORE)

FOURTH ADD In Asbestos-Related Claims...

In addition to the 24,000 persons who have already filed suit, another 21 million have been significantly exposed to the product. Estimates of those who will die over the next 30 years as a result range from 74,000 to 265,000, while the potential liability of the defendant firms may run into the tens of billions of dollars.

In the new study, the researchers found that asbestosis accounted for 76 percent of the closed claims, lung cancer for 12 percent, mesothelioma for 5 percent, and all other types of injury for only 3 percent. No asbestos-related injury was manifest for 4 percent of the sample. And 15 percent of the claims involved deceased workers.

Neither legal jurisdiction -- federal or state -- nor region of the country in which suits were brought made a significant difference in the outcome of claims, all other factors being equal, the report says.

While relatively few claims went to trial, the percentage varied markedly from state to state. In California and New Jersey, it was 1 percent or less, while it was 8 and 16 percent, respectively, in Texas and Pennsylvania, two of the high-claim-volume states.

Punitive damage awards appeared to be more frequent in asbestos cases than in product liability cases generally, the researchers found, but were still rare. In the sample, $4,934,000 was awarded 19 plaintiffs, representing 18 percent of the claims that were tried to verdict but less than 1 percent of some 3800 claims closed during the period studied.

The awards for punitive damages ranged from $4,000 to $1 million, and averaged $260,000 per plaintiff who received one. The only characteristic that researchers found to be related to the receipt of punitive damages was the state in which the claim was filed. Two thirds were in Pennsylvania.

(MORE)

In summing up their findings the researchers noted that several different approaches have been suggested by others to deal with the immense burdens the asbestos problem places on the civil justice system. These include increasing the efficiency of the existing tort system, establishing a joint claims facility outside of the court system, arbitration, and government-mandated compensation systems.

"The sheer numbers stretch the ability of some courts to handle the claims, threaten the economic survival of some defendants, and ultimately threaten the ability of injured parties to receive fair compensation," the report says.

"...the heart of the asbestos litigation problem is its huge scale. Much human suffering is involved. Tens of thousands of current and future injury claims are worth billions of dollars.... We believe that any rational course of action must be based on facts such as those developed by this study."

The executive summary to the report, R-3132-ICJ in Rand's publications series, may be obtained from its publications department, 1700 Main St., Post Office Box 2138, Santa Monica, Calif., 90406-2138. The full report will be available within a few weeks.

Rand is a private, nonprofit institution engaged in research and analysis of problems affecting the nation's security and its domestic welfare. It is headed by Donald B. Rice.

# # #

THE
INSTITUTE FOR
CIVIL JUSTICE
THE RAND CORPORATION

1700 Main Street, P.O. Box 2138, Santa Monica, CA 90406-2138 • (213) 393-0411

June 13, 1984

JUN 1 [illegible]

The Honorable Don Nickles
Chairman
Subcommittee on Labor
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Please find enclosed answers to the additional questions you posed in your letter of May 29 regarding my testimony at the Labor Subcommittee hearing on occupational disease held on April 24.

I just received the printed version of our report on variation in asbestos litigation compensation and expenses. I have enclosed a copy for potential inclusion in the record of the hearing.

If you have any additional questions or need clarification, I will be happy to respond.

Sincerely yours,

James S. Kakalik

James S. Kakalik

JSK:es

Enclosure: R-3132-ICJ

ADDITIONAL QUESTIONS FOR DR. JAMES S. KAKALIK: APRIL 24TH LABOR SUBCOMMITTEE HEARING

Q1. From your research, can you describe the typical claimant?

A1. For the sample claims closed by all or nearly all defendants between January 1980, and August 1982, the average claimant was 57 years old, 95 percent of claimants were married, 95 percent were male, and nearly all were smokers or had been smokers at some time in their lives. Three worker classifications accounted for the vast majority of asbestos-related litigation: shipyard workers (37 percent of all closed claims); asbestos-related factory workers (33 percent); and insulation workers (21 percent). Fully 71 percent of all closed claims were filed in five states (California, Massachusetts, New Jersey, Pennsylvania, and Texas); and nationwide, just over half were filed in federal rather than state courts.

Asbestosis accounted for 76 percent of the closed claims, lung cancer for 12 percent, mesothelioma for 5 percent, and all other types of injury for only 3 percent. In addition, no asbestos-related injury was manifest for 4 percent of our sample. Fifteen percent of the claims involved deceased workers.

Q2(a). What does your impending study indicate regarding the tort awards available to victims of different asbestos-related diseases?

A2(a). At least 91 percent of all claims filed that were based on asbestosis, lung cancer, or mesothelioma received compensation, while only about half of the claims for other types of injuries did so. Between January 1980 and August 1982, the average total compensation awarded or paid per closed claim nationwide was $54,000 for asbestosis, $83,000 for lung cancer, and $265,000 for mesothelioma. Only a small percentage of the claimants with no manifest asbestos-related injury received compensation; those few that did usually received only a few hundred dollars.

Q2(b). Do equally disabled plaintiffs receive relatively equal awards, regardless of type of injury?

A2(b). Our study did not collect data on the degree of disability of the plaintiffs, so we cannot answer this question.

Q2(c). If not, can you tell the Committee in general terms what the differing awards experience has been?

A2(c). Our study did not collect data on the degree of disability of the plaintiffs, so we cannot answer this question.

Senator Nickles. Thank you very much.

I appreciate the work you have done and the Rand study has done. It has helped us to focus in on the scope of the problem. As you are well aware, there are some disputes from various individuals, as I am sure you have heard today, concerning some of the figures. Do you care to respond to Mr. Baron's statements about your study?

Dr. Kakalik. Well, as you know, Mr. Baron and I do not disagree on the amount of the legal expenses. We are talking about the same ballpark and the same bottom line conclusion. I conclude 39 percent to the injured parties. He concludes 41 percent. That is the same message.

We do disagree on what the average total compensation is, and I would like to try and explain for you if I can what I think the major reasons for the difference are. They are fourfold.

First, I and Mr. Baron both agree that factory workers have had lower compensation in the tort system. I included them because they are asbestos disease claimants; they are part of the overall compensation picture. Mr. Baron feels they should be excluded. By the way, these are not, by and large, single defendant lawsuits. Most of these have at least seven defendants and are not primarily aimed at their employer. For instance, they may be an employee of the Raymark Corp. who sues the Manville Corp. and several Canadian suppliers of asbestos.

The second reason we disagree is the matter of group settlements, and whether or not they should be included in the average. Mr. Baron and I agree that the group settlements receive less compensation per plaintiff on average than single plaintiff lawsuits. I included these group settlements in the average because they are in existence, and they are part of the overall compensation picture. Mr. Baron feels they should be excluded.

Third, his data are current. Our data are from 1980 to 1982. As I indicated previously, the time trend we found was 5 percent per year from 1980 through 1982. It may have grown since then; it may have diminished. I do not know.

The fourth reason we differ is that his data came from his informal survey of 30 to 40 plaintiffs' lawyers, a survey that he has told us was not a scientifically determined data base. The people he surveyed were the more experienced asbestos lawyers who may win higher than average compensation.

I believe these four reasons explain much of the difference between his numbers and my numbers.

In sum, then, the results of my analysis of the aggregate data and my analysis of our nationally representative random sample give essentially the same results. I do know cost analysis, and I am confident that our numbers are correct.

Senator Nickles. Thank you.

You mentioned different amounts of compensation for asbestosis received by factory workers, shipyard workers, and insulation workers. Can you give us a reason for such discrepancy?

Dr. Kakalik. Well, we did look at the difference in compensation by worker classification across all of the different diseases, and we found, first of all, there was no statistically significant difference in the average compensation level for lung cancer or mesothelioma by type of worker. We did find a significant difference by type of worker within the asbestosis category, and I believe the reason is because of a difference in severity of asbestosis across worker categories.

As you have heard in earlier testimony, insulation workers tend to be in environments where they are exposed more heavily. We have talked to several defendants' and plaintiffs' lawyers about this, and there seems to be agreement that factory workers, on average, have less severe asbestosis than that found in insulation workers or shipyard workers. There would be individual exceptions, of course.

So I believe that most of the differences in compensation across worker categories is due to differences in severity of asbestosis. There are also some other factors that contribute, however. We did not have the individual wage rates for the claimants. The quality of the exposure data may be better for some worker classes than for others, enabling certain workers to make a better legal case; and there may be some differences in the amount of workers compensation paid by type of worker.

Senator NICKLES. From your study of asbestos litigation costs, do you believe the present system is efficient?

Dr. KAKALIK. Well, I think most people that have studied the present system would agree that it is a very inefficient way of processing tens of thousands of claims. Any time you have 61 cents on the dollar going to processing costs, I believe that is a time to try and find a better way.

The question then is: What is the better way? It may be streamlining the way these cases are handled through the court system. It may be having a claims-processing facility in the private sector where these claims would be processed more efficiently. It may be a Government-mandated system.

We did not make any recommendation, nor did we study any of those alternatives. This was a cost study. So I am not prepared to either condemn the present system or to endorse any alternatives to it. We simply did not get into that.

Senator NICKLES. Did your report disclose that the tort system is working, as Mr. O'Reilly indicated?

Dr. KAKALIK. That is a value judgment he made. Our report presents cost and compensation data. The judgments as to whether the tort system is working or how well it is working we left to the readers.

Senator NICKLES. Do equally disabled plaintiffs receive relatively equal awards regardless of the type of injury?

Dr. KAKALIK. As I said previously, the amount of the awards do vary widely by various factors.

Senator NICKLES. Primarily by occupation, but I mean if you have an equally disabled person. If someone has asbestosis and is similarly disabled, do you find a wide discrepancy as far as the amount of payments?

Dr. KAKALIK. Unfortunately we did not have severity data within the asbestosis category, but what I can do is to look at the two cancers, lung cancer and mesothelioma, and there we did find a marked difference, acknowledging that they are both severe diseases. If all other claim characteristics were equal, the mesothelioma average payment was $319,000 versus the lung cancer average payment of $119,000. So there a marked difference exists. We do not really know why. Perhaps it is due in part to the association between lung cancer and smoking.

Senator NICKLES. Mr. Kakalik, we very much appreciate your comments. I also appreciate your patience and indulgence in being our last panelist, and your willingness to come from California.

We will adjourn this hearing and reconvene on the 30th of this month.

Thank you very much.

[Whereupon, 5:01 p.m., the subcommittee was adjourned, to reconvene on April 30, 1984.]

OVERSIGHT ON OCCUPATIONAL DISEASE, 1984

MONDAY, APRIL 30, 1984

U.S. Senate,
Subcommittee on Labor,
Committee on Labor and Human Resources,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:35 a.m., in room SD-430, Senate Dirksen Office Building, Senator Don Nickles (chairman of the subcommittee) presiding.

Present: Senator Nickles.

Senator Nickles. Good morning.

Today is our second day of hearings on occupational disease.

Our first panelist is Victor Schwartz.

Mr. Schwartz represents the Product Liability Alliance. We appreciate your willingness to come before the committee on a Monday morning, as well as the other participants. I hope your weekend was easier than mine.

Please proceed.

STATEMENT OF VICTOR E. SCHWARTZ, ESQ., PARTNER, CROWELL AND MORING, WASHINGTON, DC, REPRESENTING THE PRODUCT LIABILITY ALLIANCE, WASHINGTON, DC

Mr. Schwartz. Thank you very much, Senator, for inviting me here today to testify about S. 44 and how it would affect matters of concern to your Subcommittee on Labor.

On behalf of the Product Liability Alliance, I also wanted to thank you for your cosponsorship of S. 44.

I would like to just briefly describe what S. 44 does, and what it does not do.

The basic purpose of the law is to establish national uniform rules for product liability cases. Product liability law is tort law. It is applied in tort cases to place responsibility on manufacturers and product sellers for wrongful acts they commit in making, designing, marketing, and selling their products.

Today, product liability tort law is a jumble of conflicting rules. There are different rules in every State and every jurisdiction. Most of the rules are not statutory, they are made by courts, and when they are made, they are made retroactively to apply to facts that occurred a long time ago.

There is chaos in the product liability laws, and in interstate commerce. Today, in any State you go to, the average amount of goods that are shipped out of State is over 70 percent. So the rules of that State give the manufacturer little or no guidelines as to what is expected of him.

Extensive hearings about product liability were held before the Commerce Committee. In fact, more hearings were held on S. 44 than any other bill before that committee in this Congress. The bill has been substantially changed and revised, but one thing is absolutely clear, that in this product liability mess there is one group that benefits, and that group is lawyers. The lawyers today are getting $7 for every $6 received by victims.

Curiously, almost every lawyer group, professional group, is against the bill, both plaintiffs and defendants.

S. 44 will reduce legal costs by eliminating unnecessary litigation. It should promote settlement. It will lower defense costs and stabilize product liability insurance costs.

Consumer groups, the AFL-CIO, and some others argue that very early drafts of S. 44 were unfair, and that they tilted the law in favor of manufacturers. The Senators in the Senate Commerce Committee, from both parties, worked to address these concerns, and on March 27, after the concerns were addressed, the bill was voted out 11 to 5. The bill that was voted out was not a bill that was drafted by business, it is a balanced bill, with input from all groups.

S. 44 holds manufacturers absolutely liable when they have a construction defect in their product. If they make any misrepresentation about the safety of their product, whether intentional or otherwise, the manufacturer is absolutely liable.

With respect to designing products, and warning about products, the standard of the bill is one of reasonable prudence, and the words of the bill are very important. Manufacturers must use the care, attention, knowledge, intelligence and judgment that society requires of its members for the protection of their own interest and the interest of others. Failure to do this results in liability.

The standard does not shield manufacturers of toxic products or asbestos. It will hold them fully liable, if they have, in any way, acted irresponsibly.

Earlier testimony before this committee that suggests a contrary result is not in accord with the language of S. 44.

Now, S. 44 does not hold manufacturers absolutely liable because of their failure to warn, or failure to design products properly. Absolute liability may be appropriate in a compensation system. Compensation systems have limited damages; they do not award damages for pain and suffering. Sometimes they do not award damages when a person has already been compensated from another source. Tort law does that. A person can have full and complete damages from another source, but tort law awards them again, and the reason tort law does that is the premise that a wrongdoer should not benefit from the fact that a plaintiff has been provident and has found another source to compensate himself.

S. 44 aggressively searches out fault and wrongdoing. It never lets a blameworthy defendant off the hook. For example, there are rules in a number of States, including New York, that bar people's rights to sue before they know or have reason to know they were injured. These are statutes of limitations which came into the law when the principal types of injuries occurred from machine tools, or lawnmowers—traumatic injuries. So when somebody was hurt, they instantly knew it, and they would have 2 or 3 years to bring their claim.

Today, sometimes someone can be injured, harmed, but they do not know it. And many years slip by. This is true in asbestos cases.

S. 44 incorporates what is called a discovery statute of limitations, so persons who are injured by toxic products, or have latent injuries, will have 2 years from the time they know, or reason to know, of the harm caused by the product. For example, mesothelioma, and its cause—asbestos.

S. 44 also permits claimants to recover when they have in some way been responsible for their own injury. Laws in many States, including my own, Virginia, bar people's claim if they have in any way been at fault, even though the manufacturer has been at fault, or if they know about a risk, and voluntarily encounter it.

In many States a claim is absolutely barred. S. 44 reduces damages based upon the fault of the injured person, the jury looks at his or her conduct, decides how he or she is at fault, how much he is at fault, and reduces damages, the claim is not barred.

S. 44 encourages safety. If a manufacturer of a chemical decides to put a warning on his product about a new hazard today, he has to worry in a few States that that might be used against him. In terms of litigation, he may be put in a worse position with older products than somebody who does absolutely nothing.

S. 44 clearly bars the admission of improvements in safety, new warnings, new designs, against a manufacturer with respect to older products. It takes away any chilling effect in the law.

Let me be crystal clear about two things that the bill does not do, because in the press, and in some testimony this has been asserted, but the bill simply does not do these things.

One is that it somehow radically changes the law with warnings and design. That somehow today, across the Nation, all you have to show is that you are injured by a product, and you automatically recover. That is simply not the law.

Professor Powers of the University of Texas did a massive study of the law, and last year, the article is called "The Persistence of Fault in Products Liability." What that article shows is that in almost every single State today the standard in warning and design is fault.

Once in a while, the courts are saying they are using strict liability. They say they are looking at the product, rather than the conduct of the manufacturer. But when you look at the test that they apply, fault permeates the test, the reasonableness standard still applies.

So S. 44 is not an assault on the law at all. It is in accord with the majority view.

Second, and this has been asserted repeatedly, S. 44 does not deal with a very difficult problem in the law, when a person has been injured by a product, and he cannot tell who manufactured the product, whether it was manufacturer A, B, or C. It is a generic product, time has passed, and we do not know who manufactured it.

S. 44 leaves that issue to the States. It is a new issue, and one in which the law is still developing. S. 44 does deal with a specific area that may be of special interest to this committee.

The relationship between product liability and workers' compensation law and the Federal Employer Compensation Act, the intent of the bill is not to interfere with worker compensation laws.

S. 44 does not, directly or indirectly, enter into the area of how much workers receive, or how much employers should pay under workers' compensation laws. It does, however, deal with the interrelationship between workers' compensation law and product liability law. This is an important area in product liability law today. The interrelationship occurs when a worker who has either collected or will collect workers' compensation benefits brings a product liability claim against a manufacturer.

Today, the variant rules in this area have led to huge transaction costs and confusion. The approach in S. 44 has been developed over a 7-year period. The approach is easy to understand, it is based on a commonsense principle, keep workers' compensation and product liability separate. Fault and no-fault systems, like oil and water, do not mix well.

Under S. 44, the subrogation lien that would be brought by the workers' compensation carrier against the product liability manufacturer is eliminated. This is beneficial to the manufacturer as a way of accounting for the fact that there is often employer fault involved in product liability cases.

On the other hand, S. 44 prohibits manufacturers from bringing contribution or indemnity claims against the employers. While the employer may have been at fault, it is inappropriate to subject him to tort liability through the back door of a contribution suit when that is barred through the front door, the employee cannot sue him.

The approach reduces litigation. There are no third-party actions. It also reduces cost shifting from the workers' compensation system to product liability law. The approach does not take anything away from the worker.

Earlier versions of the bill reduced workers' product liability awards by the amount of the employer fault, something called equitable apportionment. This has been eliminated. Earlier versions of the bill also made the worker wait until worker compensation transaction was completed, until he could bring a product liability claim. This too has been eliminated.

The approach has been supported by the overwhelming majority of employer and manufacturer community. Recently, the AFL–CIO, which still opposes S. 44, said that the section on the relationship between workers' compensation and third-party litigation has been redrafted to answer prior criticism, and is now worthy of favorable consideration.

The bill does not address the issue under the Federal Longshore and Harbor Workers' Act. This committee has looked into that area a number of times, and left that discretion to this committee.

I would like to close by addressing a special concern that has been raised by the AFL–CIO very recently, that they suggested that under section 6 of the bill, warnings about a product need only be given to a worker's supervisor. One can fully appreciate that concern in light of earlier drafts of the bill.

However, that concern was addressed in the bill as reported out by the Commerce Committee. The bill, as reported out, follows the

Restatement of Torts and current law, and it requires that the warnings be given to the employee himself, unless in a balance of considerations, practical technological feasibility cannot really do it.

In sum, S. 44 is a balanced bill, but it is not directed at curing the problem that affects asbestos litigation. When you have a situation with over 20,000 pending claims, and the promise of more than an equal number to arise in the not too distant future, the tort system may well break down, especially if latent injuries are involved.

S. 44 does not attempt to bar such claims. It allows them to be pursued. While having a set of uniform laws would facilitate settlement, it is not a means to address so mass and specialized a problem.

Recently both the Washington Post and Businessweek, periodicals that do not always agree on a lot of issues, have suggested that S. 44 is needed; it should move forward. I hope it will have the support of the members of this committee.

Thank you.

[The prepared statement of Mr. Schwartz and responses to questions submitted by Senator Nickles follow:]

TESTIMONY OF
VICTOR E. SCHWARTZ, ESQUIRE

Senator Nickles, thank you for your very kind invitation to testify today about S. 44 and how it would affect matters of concern to your Subcommittee on Labor. On behalf of The Product Liability Alliance, to whom I serve as counsel, I wanted to express my thanks for your co-sponsorship of that bill.

I would like to begin with a brief description of S. 44 -- what it would do and what it would not do.

The purpose of S. 44 is to establish national uniform rules for product liability cases. Product liability law is tort law. It is applied in tort cases to place responsibility on manufacturers and product sellers for wrongful acts they commit in making, designing, marketing, or selling their products. Currently, product liability tort law is a jumble of confusion. There are different sets of rules in each of the 50 states and the District of Columbia. Most are not statutory, but have been developed by courts. Therefore, rules change and may change retroactively.

This chaos in the product liability system creates major problems in interstate commerce. Today, an average of over 70 percent of the products manufactured in a state are shipped out of state. Although products move in one national marketplace, manufacturers are given diffused and uncertain rules regarding their responsibility.

Both as a matter of common sense and as shown at the extensive hearings before the Senate Commerce Committee, these different rules are costly, particularly in generating unreasonable and unnecessary increases in legal costs. Every time a product liability case is filed, the lawyers have to begin anew in researching the law. Prompt and fair settlement of cases is severely hampered.

S. 44 will reduce legal costs by eliminating unnecessary litigation. It will promote settlement. It will lower defense costs and stabilize product liability insurance costs.

Consumer groups, the AFL/CIO and some others argued that certain provisions in early drafts of S. 44 were unfair and tilted in favor of product liability defendants. Seantors Kasten, Gorton, Danforth, Inouye and others, who voted for the bill in the Commerce Committee, worked diligently to address these concerns. As a result, S. 44 was substantially revised and, as reported by the Senate Commerce Committee on March 27, 1984 by a vote of 11 to 5, is a fair and balanced proposal. It is not a bill that was drafted or architected by business. It is the result of work that built upon the Uniform Product Liability Act with over three years of input from consumers, academicians, the AFL/CIO as well as product sellers.

S. 44 protects consumers by holding manufacturers absolutely liable for harms caused by construction defects and by any misrepresentations about their product.

S. 44 also provides rules for cases involving harms caused by the failure to use a safe design and the failure to provide a warning about a dangerous aspect of a product. The rules hold manufacturers to a standard of "reasonable prudence" in design and warning cases. They must use the "care, attention, knowledge, and intelligence and judgment that society requires of its members for the protection of their own interest and the interest of others . . .". Failure to do so results in liability. This standard of "reasonable prudence" does not shield manufacturers of asbestos or toxic products. It will hold them fully liable if they have in any way acted irresponsibly. Earlier testimony before this committee that suggests a contrary result is simply not in accordance with the specific language of S. 44.

S. 44 does not hold manufacturers absolutely liable without regard to fault for their failure to warn or failure to design their product properly. Absolute liability might be appropriate under an administrative compensation system with limited damages. It is not appropriate in tort law. Recovery through the tort system is based on wrongdoing. The damage structure reflects that by allowing product liability tort claimants to recover large damages awards even though they may have received total compensation from another source. The damages include amounts for pain and suffering which, historically, reflects the fact that the defendant was a wrongdoer. A no-fault compensation system does not allow such damages.

S. 44 aggressively searches out fault and wrongdoing. It never lets a blame-worthy defendant off the hook. For example, it eliminates rules, in a number of states, including New York, that bar a product liability claim before the injured person discovers, or has reason to discover, his harm and its cause. These rules are particularly harsh in asbestos cases where claimants do not discover their harm until many years after they have been exposed to the product.

S. 44 also permits claimants to recover damages even if they were, in part, responsible for their own injury. For example, if a worker were negligent in handling asbestos or if he voluntarily and knowingly encountered the product exposure, his claim would not be barred, but simply reduced based on his own fault. This will improve the likelihood of recovery for claimants in a number of states. It is the most progressive rule that is followed by the states.

S. 44 encourages safety by prohibiting any improvements in warnings or design from being offered as evidence that an older product was defective. Thus, if a chemical manufacturer discovered a new hazard with respect to his product, he could improve the product warnings without fear that the improvement would be used against him in litigation. Further, S. 44 requires manufacturers to warn about hazards discovered _after_ the product has been manufactured.

Let me be crystal clear about two things that the bill does _not_ do -- and I mention these because on occasion they have been mentioned by opponents of the bill and repeated by the news media.

First, S. 44 does _not_ undermine existing rules on design and warning in the overwhelming majority of states. Those rules do not create absolute liability but look to the situation at the time of manufacture and either directly or indirectly impose a standard of reasonableness and fault. A careful study done in 1983 by Professor Powers of the University of Texas School of Law demonstrates in almost every state that current product liability rules, although sometimes called strict liability in the design and warning areas, are, in fact, fault based rules. See Powers, The Persistence of Fault in Products Liability, 61 Texas Law Review 777 (1983). S. 44's fault standard is severe and uncompromising. Asbestos cases reported in the Asbestos Litigation Reporter further support this fact. With the exception of one state, asbestos cases, which are based on warnings, involve the showing of fault. Concerns expressed by victims groups that somehow S. 44 will ban existing claims, again, do not find support in the words of the statute itself.

Second, S. 44 does not bar persons injured by asbestos or other products that may cause latent injuries from litigating their claims if they did not know who made the product. This new area of law is left to the states.

S. 44 deals with an area that may be of interest to this Subcommittee -- the relationship between product liability and state workers' compensation law and the Federal Employer Compensation Act. The intent is not to interfere with workers' compensation laws. S. 44 does not, directly or indirectly, enter into the area of how much workers receive or how much employers should pay under workers' compensation statutes. It does, however, deal with the interrelationship between workers' compensation law and product liability law. This is an area of great importance in product liability law today. This interrelationship occurs when a worker, who either has collected or will collect workers' compensation benefits brings a product liability suit against a manufacturer. Today, the variant rules in this area have led to huge transaction costs and unnecessary litigation.

The approach in S. 44 designed to clarify the interrelationship has developed over a seven year period. The Approach is based on a common sense principle -- keep the workers' compensation and product liability systems separate. The fault and no-fault systems, like oil and water, do not mix well.

Under S. 44 the subrogation lien that would be brought by the workers' compensation carrier against the product manufacturer is eliminated. This is beneficial to the manufacturer and is a way of accounting for the fact that there often is employer fault involved in product liability cases. On the other hand, S. 44 prohibits manufacturers from bringing contribution or indemnity actions against employers. While the employer may have been at fault, it is inappropriate to subject him to tort liability through the back door of a contribution or indemnity suit brought by a manufacturer -- a suit that would be, in general, prohibited if it were brought by an employee.

This approach, as you can see, substantially reduces litigation -- there are no third party actions. It also reduces cost shifting from workers' compensation systems to product liability law. The approach does not take anything away from the worker. Whule earlier versions of the bill reduced workers' product liability awards by the amount of employer fault, this has been eliminated. Earlier versions also asked employees to wait until their worker compensation claims were completed before bringing a product liability action -- this, too, has been eliminated.

The approach has been supported by the overwhelming majority of the manufacturer and employer communities. Recently, the AFL/CIO, which still opposes S. 44, has indicated that "the section on the relationship between workers' compensation and third party litigation, in particular, has been redrafted to answer prior criticisms and is now worthy of favorable consideration . . .". The bill does not address this issue under the Federal Longshore and Harbor Workers' Act because the Congress in 1972 and this year established specific rules regarding the liability and responsibility among shipbuilders, stevedores and other persons involved in maritime activities.

I would like to close by addressing a special concern that the AFL/CIO has raised about the bill. In a recent statement to the Commerce Committee, the AFL/CIO suggested that under Section Six of the bill, warnings about a product need only to be given to a worker's supervisor. One can fully appreciate that concern in light of earlier drafts of the bill. However, that concern has been addressed in the bill as reported out by the Commerce Committee. The bill, as reported, follows the Restatement (Second) of Torts and current law in the overwhelming majority of states. It requires that warnings be given to the employee himself, unless in light of practical and economic difficulty and the reduced likelihood that the product would cause harm, including the probable seriousness of that harm, a reasonably prudent person would have given such instructions to an employer. If a warning is given to the employer, it must be direct, clear and totally adequate.

In sum, S. 44 is a balanced product liability bill. It is not directed at curing the present problem that affects asbestos litigation. When you have a situation with over 20,000 pending claims and the promise of more than an equal number to arise in the not too distant future, the tort system may well break down -- especially if latent injuries are involved. S. 44 does not attempt to bar such claims -- it allows them to be pursued. While having a uniform set of laws in each of our states will help facilitate the settlement of such claims, it is not a means to address so mass and specialized a problem.

Again, I appreciate your interest in the bill and your support of S. 44. I believe that you will find that S. 44 stands up very well under close scrutiny. In that regard, the need and legitimate purpose of Federal product liability legislation has been appreciated in recent weeks by periodicals as diverse as The Washington Post and Businessweek. I hope that all members of your subcommittee will also regard S. 44 favorably and support its enactment into law this year.

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June 6, 1984

The Honorable Don Nickles
Chairman
Subcommittee on Labor
SD-428
United States Senate
Washington, D.C. 20510

Dear Senator Nickles:

Thank you very much for the opportunity to testify before the Labor Subcommittee hearing on occupational disease held on April 30. I deeply appreciate your conscientious effort to help clarify the relationship between S. 44 and occupational disease legislation.

In that regard, I have enclosed my answers to your "follow-up" questions.

I would be remiss if I did not also comment on the superb professionalism of your legislative staff person, Rick Lawson. It has been a privilege to deal with you, Rick and your subcommittee.

With highest regard, I am,

Sincerely,

Victor Schwartz
Victor E. Schwartz

Enclosure

OCCUPATIONAL DISEASE HEARING

ANSWERS OF
VICTOR E. SCHWARTZ

1. Is S. 44, the Product Liability Act, the answer to the asbestos compensation problem? If not, what type of approach should the Labor Subcommittee consider?

ANSWER

The Product Liability Act, S. 44, will not resolve the asbestos compensation problem for several reasons. First, the volume of asbestos-related claims is enormous and is expected to increase. Currently, about 25,000 suits are pending. New claims are being filed at a rate of 500 per month. The sheer volume of the caseload is not only unmanageable, it also threatens to bankrupt the companies involved. Such a result will leave future claimants totally uncompensated. S. 44 does not propose to address this problem which is peculiar to the asbestos situation.

Second, S. 44 does not resolve highly controversial and much litigated issues, such as the Federal Government's responsibility for asbestos-related claims; proof of causation in claims involving lung cancer; and the problem of identifying the responsible defendant. These issues are beyond the scope of a general product liability bill.

Given the volume of claims and the problems of proof, the asbestos situation demands a solution outside the traditional tort litigation system.

2. Under S. 44, employees are not required to complete their workers' compensation claims before bringing a product liability action.

(a). Will the claimant's award be automatically reduced by the amount which the judge predicts will be due under workers' compensation?

ANSWER

Under S. 44, all product liability judgments rendered against a manufacturer for injuries occurring in the workplace which are also compensable under workers' compensation will be reduced by the amount the claimant is or would have been entitled to receive in workers' compensation benefits. The rationale for the reduction, as explained in Senate Report No. 98-476, is to preserve the integrity of both the tort system and the workers' compensation systems by keeping them separate. On the one hand, the bill eliminates the employers' subrogation lien. On the other hand, the bill prohibits reduction of the tort award according to the employers' percentage of responsibility for the harm. The bill, adopting the suggestion of Professor Arthur Larsen, simply reduces the tort award by the amount of workers' compensation benefits received by the claimant or by the amount of benefits the claimant would receive.

(b). What if this figure later proves to be inaccurate?

ANSWER

The amount of workers' compensation benefits to which the claimant is entitled may be estimated by the court where, for example, the tort award occurs before the resolution of the workers' compensation claim. The court estimate of workers' compensation benefits is essential in order for the court to enter the tort judgment. If the estimate is inaccurate according to a later determination of the workers' compensation board, the judgment will be revised accordingly. See Senate Report No. 98-476, at note 144.

It is relevant to note that an earlier version of the Product Liability Act would not have allowed the court to estimate the workers' compensation benefits to which the claimant was entitled. That version of the bill would have required the claimant to file his or her product liability action after the resolution of the workers' compensation claim. This procedure would have ensured that the amount subtracted from the tort judgment was accurate. In response to concerns of various groups, the bill was revised.

(c). What happens if the claiamnt does not want to file for workers' compensation?

ANSWER

S. 44 seeks to maintain the integrity of two separate and distinct systems -- workers' compensation and tort. In doing so, it assumes that each system will be used where appropriate. In other words, it assumes that a person injured by a defective product will recover in tort and that a person injured in the workplace will recover available workers' compensation benefits.

3. One purpose of workers' compensation is to shield employers from third party lawsuits. How, then, are employers being successfully sued for tort awards?

ANSWER

Employer immunity for tort liability has been eroded in three principal ways. First, employees have been permitted to sue their employers on a theory that the employer acted in a "dual capacity" both as the employer and as the manufacturer of the product. Second, employees have been permitted to sue their employers on a theory of intentional tort that is broader than traditional intentional torts. Third, manufacturers have been permitted to sue employers in contribution and indemnity on the theory that it was the employer who caused all or part of the claimant's harm. See Senate Report No. 98-476 at p. 49.

4. It has been stated that S. 44 effectively eliminates the awarding of punitive damages in mass injury cases such as asbestos. What is your reply?

ANSWER

S. 44 does not eliminate punitive damage awards for asbestos claims or any other type of product liability action. Section 12 states that punitive damages shall be awarded upon proof that the defendant acted with reckless disregard for the safety of others, a standard that is similar to that followed in virtually every state.

Section 12 specifies that the punitive award shall be made one time for a single allegation of reckless disregard. This one time award provision will ensure swift and effective punishment in an amount (determined by a judge) that is fully commensurate with the nature and gravity of the defendant's bad conduct. As long as the amount has a sufficient deterrent and punitive effect, as the bill contemplates, it makes no difference that it is paid in a one time lump sum.

The problem of repeated litigation of and exposure to punitive damages is a serious one for all parties to product liability cases. They may bankrupt a company before all those who are injured have received compensatory damages. In Jackson v. Johns-Manville Sales Corporation, 727 F.2d 506 (5th Cir. 1984), the Fifth Circuit recently noted "the need to maintain viable enterprises to meet future compensation liabilities." That Court denied punitive damages in an asbestos case stating that "the basic policy objectives of punitive damages are satisfied . . . by multiple exposure to compensatory damages."

S. 44 would not take this drastic step of totally eliminating punitive damages.

Senator NICKLES. Thank you, Mr. Schwartz.

Will S. 44 in any way limit or cut off the right of asbestos victims to sue because of the statute of limitations?

Mr. SCHWARTZ. No; it should expand their right to sue.

As I mentioned, in a number of States, New York as an example, there are others throughout the Nation, statutes of limitation are in the law that begin to run as soon as there is an injury to a person, or exposure to a product resulting in a latent harm. And all of a sudden, many years later, persons discover they have such a harm, and they go and visit an attorney, and find out that their claim has been lost.

S. 44 uses a discovery statute of limitations. It is the most progressive rule available. It says that the injured person has to discover, not only the harm, but also its cause, and after that he has 2 years to bring his cause of action. So this should help permit such claims.

Senator NICKLES. Regardless of whatever the State's statute of limitation might be, this would mean that you would have 2 years after the notice of harm?

Mr. SCHWARTZ. That is right, it would preempt, in tort law, not workers' compensation law, strictly in tort law, existing State statutes of limitations if they are restrictive.

Senator NICKLES. Most asbestos claims are based on manufacturer's failure to warn. You indicate that the standard of reasonable prudence in warning cases will not shield manufacturers of asbestos or toxic products. Would you elaborate a little further?

Mr. SCHWARTZ. OK. With respect to warnings, almost every court in the United States says that the basis of liability is really fault. And the reason for that is this, that if you are being tested, about whether your warnings are careful, and you use a standard other than going back to the time the manufacturer made the product, and what was the diligence he should have applied, you in effect have a claimant's verdict in every single case.

After something happens, then we know how to warn, how to avoid it. The bill, apart from putting a fault standard, also supplies a continuing duty to warn.

So let us say the manufacturer learns in 1960 that his product, that he made in 1940, was harmful. Under S. 44, he must take the steps of reasonable prudence to alert people to that risk, and that is something that will be helpful to claimants.

In one State, New Jersey, there is a case in the asbestos area called Beshada, and Beshada said that manufacturers can be subject to liability for failure to warn, even if they neither knew nor should have known about the risk. Beshada said that a manufacturer can, in pricing his product, pass off the cost of risk in the price of its product.

But Beshada, in using what might be called an absolute liability rule, made no adjustment in damage rules. It kept damage rules that are predicated on fault.

In other words, even if Beshada had been fully and totally compensated from other sources, he would still recover, and he would get damages for pain and suffering. It has not been followed in other States.

There is legislation pending before the New York State—excuse me, the New Jersey State Legislature, to overrule it. It remains an isolated island in the law.

Senator NICKLES. Thank you.

You state that S. 44 does not bar persons injured by asbestos from litigating their claims if they do not know who made the product. You indicate this is a new area of law that is left to the States. Would you tell us how that would work?

Mr. SCHWARTZ. Well, the State courts today are all over the lot on this issue, and it is still a new issue. You have a situation where somebody can show fault on the part of a group of manufacturers, but they do not know which manufacturer made the product. The court is faced with a dilemma.

On the one hand, if it permits the claim, it may allow a claim against a product manufacturer who really did not injure the claimant.

On the other hand, if it dismisses the claim, it allows a group of manufacturers who may have been at fault, to be responsible to no one.

Some States have taken that position and said there will be no recovery. States that have permitted a recovery have each come down for a different test. New York appears to say it is maybe a concert of action, if everybody does the same thing at the same time and knows the other person did it.

California says to allocate responsibility by market share. Wisconsin says market share plus let us look at the wrongdoing. Michigan uses a burden-of-proof situation based on an old case involving two hunters in the woods.

It is an area that really is left to the States for development. It is not settled, and it is one that probably deserves more careful attention, and legislative attention, to provide an alternative way to approach it. The courts just have a problem.

S. 44 is a tort law, it is very difficult to find a tort law resolution of that problem.

Senator NICKLES. I have several questions, and I need to get to the other panelists.

Let me just submit those questions to you in writing, and if you will respond to those, I would certainly be appreciative.

Thank you for your appearance today.

Mr. SCHWARTZ. Thank you very much.

Senator NICKLES. Our next panelist is Frederick Ross, president and chief executive officer of Raymark, from Connecticut, who represents the Committee for Equitable Compensation.

STATEMENTS OF FREDERICK J. ROSS, PRESIDENT AND CHIEF EXECUTIVE OFFICER, RAYMARK CORP., TRUMBULL, CT; AND JOHN L. BALDWIN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, PITTSBURGH-CORNING CORP.; AND PRESIDENT OF THE COMMITTEE FOR EQUITABLE COMPENSATION

Mr. ROSS. Thank you, Mr. Chairman.

Accompanying me this morning is Mr. John Baldwin, who is the president of our Committee for Equitable Compensation, and he would like to make a brief introductory statement.

Mr. **Baldwin**. Thank you.

Good morning, Senator.

Senator **Nickles**. Before you get started, Mr. Baldwin, I have a couple of comments.

All of the panelists' comments will be entered into the record in full, and likewise, particularly looking at the length of your statement, we would appreciate summaries of those statements. I would appreciate all of our panelists to confine their remarks within 10 minutes.

Mr. **Baldwin**. I would just take a couple of minutes, Senator.

Senator **Nickles**. Thank you.

Mr. **Baldwin**. I am John L. Baldwin, president and chief executive officer of Pittsburgh-Corning Corp. I serve also as president of the Committee for Equitable Compensation.

Before I turn the microphone over to Fred Ross, I would like to make a few remarks about our organization, and to express our great appreciation to this subcommittee and its staff for providing us an opportunity to testify regarding a very serious national problem—the flood of occupational asbestos-disease claims clogging our courts and clouding our companies' future.

Our committee was formed in the fall of 1982 for the purpose of furthering and supporting congressional and other efforts to develop an equitable system of compensating victims of diseases associated with exposure to asbestos. Our 13 members are companies concerned with the asbestos compensation issue, principally current or former manufacturers of products that contain asbestos. Our membership does not include any of the companies undergoing chapter 11 reorganization.

The members of our organization are exploring all reasonable avenues that might help resolve the dreadful national crisis surrounding asbestos compensation. We are doing what we can to resolve at least some of the difficulties through nonlegislative means—including establishment of a facility to provide privately negotiated, nonjudicial settlements; and possibilities of using the ongoing bankruptcy proceedings involving the Manville Corp. as a forum in which at least some of the problems can be aired.

For example, you may have read in the newspapers recently about the efforts of some of the asbestos manufacturers and some of the insurers to establish an improved process for reviewing and settling asbestos health claims. If successful, such approaches could reduce some of the enormous cost and delay of the present litigation. It may well be, however, that Federal legislation provides an answer to all aspects of the asbestos compensation problem.

The primary effort of our organization is to support and assist with congressional initiatives to establish a national program for prompt and equitable compensation for those suffering from asbestos-related diseases. It is for this reason that we are particularly pleased to appear before you today.

Senator Nickles, you and your staff are to be congratulated for holding these hearings to explore this very serious problem facing our Nation.

And with your permission, I will turn the microphone over to Mr. Fred Ross.

Senator **Nickles**. Mr. Ross, please proceed.

Mr. Ross. Mr. Chairman, my name is Frederick J. Ross. I am president and chief executive officer of Raymark Corp. of Trumbull, CT. I am here today to testify on behalf of the Committee for Equitable Compensation, which my company helped to establish almost a year and a half ago.

I want to thank this subcommittee, and you, in particular, Chairman Nickles, for extending this opportunity to testify before you on this important subject today.

Although I shall speak only of asbestos, we all recognize that it is only one of a number of workplace materials associated with occupational disease. However, asbestos is truly unique in terms of the scope of the problem and the need for immediate action.

Regarding other occupational diseases, you will undoubtedly hear witnesses caution you that scientific and other uncertainties make it premature to determine whether any response is called for.

For asbestos, however, the problem is immediate and compelling, and the only remaining issue is how best to structure a solution.

Raymark, like other asbestos-product manufacturers, confronts an enormous problem whose genesis is historical but whose impact is current and immediate. In recent years, Raymark's research effort has enabled it to reduce its reliance on asbestos. Nevertheless, products manufactured by other employees and other managements decades ago have come back to haunt us, in the form of thousands of disease claims that are inundating the courts and threatening our future.

Senator Nickles, it has been almost 2 years since UNR Industries became the first major manufacturer to be driven to bankruptcy by the asbestos litigation, followed soon thereafter by Manville and Amatex. Our companies have testified at numerous congressional hearings to discuss this increasingly critical situation, including a joint appearance by John Baldwin and myself before the House Labor Standards Subcommittee about a year ago. Now yet another year has gone by, and, frankly, time is running out.

The difficulties faced by an already overburdened civil justice system, and by the claimants who must depend on it, and by our companies that must pay for it, have continued to mount.

Over the past year, since my appearance before the House subcommittee, approximately 6,000 new asbestos health claims have been filed against Raymark and other companies, bringing the total to more than 25,000 claims. Because of the long latency period for asbestos diseases, we anticipate a steady stream of new claims for decades to come. One study has estimated that the total will probably exceed 52,000 claims by the early years of the next century.

Each month that goes by, new plaintiffs seek damages from Raymark, totaling about $870 million. In the face of such claims, we have no choice but to defend ourselves vigorously. In 1983, Raymark and its insurers had to spend nearly $10 million to fund its legal defense.

Of our enormous expenditures over this period, well over half have been received by defense lawyers and plaintiffs' lawyers, not by the claimants at all. The Rand Corp. has estimated that, of every dollar spent by the asbestos manufacturers and their insurers in cases that have been closed, claimants receive about 39 cents. If the present system continues, we conservatively project that fees exceeding $5 billion will eventually be received by a limited number of law firms.

Mr. Chairman, this tragic breakdown of the tort system serves no one well—certainly not the disease victims themselves. Persons in immediate need are often forced to wait for many years before obtaining any decision on their claims. At Raymark it often takes us 5 years to resolve an asbestos claim in the courts.

Furthermore, unpredictable jury awards can reward one claimant handsomely, while providing equally meritorious claimants little or nothing. Legal technicalities prevent recovery by many others.

Compounding the failure of the existing system, some insurance carriers have refused to pay asbestos claims until ordered by a court to do so. As a result, many manufacturing companies that paid millions of dollars for insurance premiums over the years cannot obtain the benefits of their insurance policies until after protracted and very expensive litigation.

Furthermore, the enormous uncertainties and delays under the existing tort system prevent us from being able to accurately plan our financial future. Raymark's independent accountants give only qualified approval to our balance sheets, and our existing commercial lenders have demanded additional security for their loans.

Ultimately, Mr. Chairman, as our assets become further eroded, those most at risk are the workers whose diseases will not develop until future years. Three companies are already in chapter 11. If the present situation continues, I leave it to your wisdom, Senator Nickles, to anticipate who may eventually be left to pick up the tab for these future claimants.

Perpetuation of the status quo, with its steady depletion of these necessary resources, cannot be tolerated. But what does the corporate officer, such as myself, who inherited this crisis, do to meet his obligations, not only to asbestos victims and their families, but to the corporation's shareholders and employees? What are the options available to us?

Some have argued that we should do nothing. But those who advocate this position are not those who are confronted by the problem. The status quo—with its steady depletion of corporate resources needed to pay claimants, while bringing millions of dollars into a limited number of law firms—simply cannot continue.

A second option is to attempt to resolve at least some of the controversy through nonlegislative mechanisms. As John Baldwin noted, we are committed to doing what we can through such efforts.

A third option is to reform the substantive tort law. Such a reform, while warranted, would not have a significant effect, overall, on the asbestos litigation. S. 44, which was recently reported favorably by the Senate Commerce Committee, would establish a liberalized statute of limitations and statute of repose—actually increasing the number of asbestos tort claims that would be filed—and would not address the unique and urgent problems posed by the vast number of asbestos cases clogging our courts.

The fourth option is to provide a no-fault administrative compensation system to replace the existing litigation. Such an option is needed now for asbestos, and this is the option that we support.

The Committee for Equitable Compensation believes that any comprehensive legislative solution must meet 10 fundamental objectives:

First, the program must pay an adequate benefit.

Second, claims must be processed and paid promptly.

Third, claims must be determined on a no-fault basis if the enormous litigation costs and delays are to be avoided.

Fourth, the program must totally eliminate tort litigation and provide an exclusive remedy.

Fifth, all responsible parties—including businesses, their insurers, and the Federal Government—must contribute to the program's funding.

Sixth, the program must be affordable, and parties' obligations must permit sound financial planning and funding.

Seventh, claims bust be decided on the basis of the best medical evidence and expertise.

Eighth, administrative costs must be strictly limited.

Ninth, new bureaucracies must be avoided.

Tenth, the program must operate with minimum interference in State workers' compensation programs.

Although bills have been introduced in both Houses of Congress, none of them meets all of these criteria. We, therefore, would strongly urge that you and your Senate colleagues now develop sound legislation to address the problem of asbestos disease compensation.

Chairman Nickles, I believe you are aware that our committee has prepared a draft legislative proposal, which we have spared with your subcommittee staff. While we are certainly not wedded to any particular concepts, and believe our own approach still needs further refinement, ours is the best we have seen so far—and we hope that this subcommittee will consider our ideas as you develop your proposal to solve this terrible problem facing us all.

Before closing, I would like to identify four issues that I believe are fundamental to the development of any legislative solution.

The legislation we are discussing should apply only to asbestos. Unlike some other substances, asbestos is clearly associated with specific medical disorders, and the breakdown in the civil justice system regarding asbestos is truly unique and unprecedented. No other substance or kind of occupational disease has come close to generating the massive amount and complexity of litigation that we face regarding asbestos.

Indeed, the American Bar Association—the most prominent spokesman for our Nation's lawyers—has called this problem a "catastrophic phenomenon on a national scale to asbestos workers and the asbestos industry," and the ABA now favors "appropriate Federal legislation to establish methods to provide adequate compensation" to those suffering from asbestos related diseases.

A second point involves the program's funding. The United States served as a more than equal partner with private industry in the Government's shipbuilding program during World War II and the Korean conflict. The Government should therefore now share with its industrial partners the financial burden of the resulting health tragedy.

The majority of existing asbestos claims have arisen from exposure in the wartime shipbuilding effort. Indeed, at my company, Raymark, over 70 percent of the claims derive from such shipyard exposure. And the Government played the leading role in the use of—and excessive exposure to—asbestos in wartime shipbuilding. Let me illustrate this with a few stark facts:

In ships constructed or refurbished during the war years, the Government required use of enormous quantities of asbestos, specified by name.

The Government itself imported large amounts of asbestos fiber and it stockpiled, allocated and sold the fiber and other asbestos products to private suppliers and construction companies.

The United States directly employed over 1 million shipyard workers; and at both Government and private yards the Federal Government assumed control of workers' health and safety, and closely supervised every aspect of the operation.

Throughout the war years, the Government was well aware that shipyard exposure to asbestos could cause lung disease, and the Government's own files contain complaints that the United States was not protecting shipyard employees adequately against this risk.

The U.S. Government should be held equally responsible without any industrial components——

Senator NICKLES. Mr. Ross, let me interrupt you, because I have a time dilemma.

You mentioned Government liability. The Government should pick up part of the cost. What part of the cost do you recommend?

Mr. ROSS. Well, our recommendation, Mr. Chairman, is 50 percent.

Senator NICKLES. Where do you get the 50 percent?

Mr. ROSS. Well, statistics show that about 50 percent of the claims that we are receiving, we have received to date, have come from shipyards in which the Government was either the primary employer, or the controller of the workplace, or supplied the asbestos, which was in turn fabricated into the products, and sold to those shipyards.

Senator NICKLES. You are saying strictly with Raymark, 50 percent of your claims were tied back to the shipyard——

Mr. ROSS. No, I think the Rand study shows 50 percent. In our own case, the cases filed against Raymark, we actually show 70 percent of them came from shipyards.

Senator NICKLES. What about industries that had asbestos, and were not connected with the Government, in any way or not connected with the shipyards. Do you think that the 50-percent rule should still apply?

Mr. ROSS. Well, 50 percent seems to be a reasonable rule, based on the cases that have been brought to date.

Now, as future cases come in, if that proportion changes, perhaps there should be consideration to changing the proportion of Government funding.

Senator NICKLES. You mentioned in your case you felt like 70 percent of your asbestos-related claims had some connection with your doing work for the Government?

Mr. ROSS. Seventy percent of the claims against Raymark have been brought by shipyard employees, which were operating either directly or indirectly under the control of the Government.

Senator NICKLES. Mr. Baldwin, with your company, Pittsburgh-Corning, is there a similar correlation?

Mr. BALDWIN. Yes, indeed there is, Senator. There is a similar correlation. Our experience shows not quite the same 70 percent that Raymark has, but in excess of 50 percent.

Senator NICKLES. Over 50 percent of the claims that you have had asbestos. I am looking at existing claims you can find directly related to work that you were doing for the Government?

Mr. BALDWIN. Where the product was used in shipyards, where the Government was involved, either as an employer or a supplier.

Senator NICKLES. I am not familiar with Pittsburgh-Corning, or what you were doing for the Government. What would that be?

Mr. BALDWIN. We made an insulating-containing product, primarily for pipe installation.

Senator NICKLES. And those were used?

Mr. BALDWIN. Aboard ships, primarily for the control of heat.

Senator NICKLES. Do you have concern about an already bankrupt Government, $200 billion deficits, and yet opening up multibillion dollars' worth of liability?

Mr. ROSS. I absolutely do, Senator, and this is anything but a Government bailout of industry. This is a situation where any company, were it in the same position as the U.S. Government, would surely be held liable for this responsibility, for this—for a share of funding for these claims, and I cannot believe that the American people, or this Congress would feel that a Government that is responsible for the injury to people, at least on an equal basis, as industry, should go scot-free, should never be tried in court, because the Government has not tried today, under sovereign immunity, if it were tried, as I pointed out, not only did it control the health and safety aspects of the employment of the people in the shipyards, not only did it own shipyards, and employ people to work there, but it was, in every respect, a market participant and a supplier of asbestos product, in the same manner as every industrial company.

So I think, deficits aside, we have a case of equity here, where the Government is responsible, we are not asking for a bailout, or some kind of a funding program, but the Government has responsibility, which I think this Congress should recognize by having them a party to the funding, under this kind of legislation.

Senator NICKLES. Mr. Ross, do you still use asbestos in your products at Raymark?

Mr. ROSS. The products that represent the source of this litigation are no longer made by our company, and I would say that is true of the vast majority, if not all of the members of the CEC. Those products were primarily insulation products, and either not manufactured at all, or have been converted to other fibers, many years ago.

We are talking about exposures, as you realize, that go back 20, 30, or 40 years. The different products, different managements, and a whole different——

Senator NICKLES. Mr. Baldwin, does your company still use asbestos?

Mr. BALDWIN. We stopped the manufacture of asbestos-containing products in 1972.

Senator NICKLES. Was it the result of the liabilities that you were looking at down the road?

Mr. BALDWIN. There was——

Senator NICKLES. As one of the factors?

Mr. BALDWIN. A series of reasons, Senator, yes.

Senator NICKLES. Correct me if I am wrong. Are there still not some companies that are engaged in manufacture and production and use of asbestos today?

Mr. ROSS. I do not want to mislead you, Senator. Our company still uses and manufactures products containing asbestos, but not the products that are the source of the vast majority, 99 percent of these lawsuits.

Senator NICKLES. Understanding that, should the Government share in any potential liability of cases you might have in the future if you are still using asbestos today, and you are fully knowledgeable of the potential harmful effects of asbestos?

Mr. ROSS. I do not see any reason why they should, because they occupy none of the roles of the products we make today, but they did with the products supplied to shipyards during the war years.

Senator NICKLES. Do you draw the line somewhere as far as direct connection of Government association, before there would be any Government contribution?

Mr. ROSS. No, we propose that a no-fault system be set up, and I think if we are going to try to find fault, we are going to be back in the litigation system again. I think we have to adopt what seems to be a reasonable proportioning responsibility among participating parties, and agree to that, at least for a period of time, following which the cases could be reanalyzed at a later date to determine the kinds of exposures that are existing. And if it turns out that exposures where the Government was responsible, such as shipyard exposures are receding in numbers, that composition of funding be changed.

The approach we are suggesting is a pragmatic no-fault approach. Now, we in industry do not believe that we are at fault.

In fact, I think the litigation would support that point of view, in that in our company at least, we have had 71 cases go to trial, and we have won 60 percent of those, indicating that in those cases, at least, we were not at fault.

The bottom line, however, is that practically, our society by its mechanisms of litigation, et cetera, has imposed a certain cost on us, which is going to be—which is today, and will be in the future, unbearable, and something has to be done about it.

Therefore we have to forget about the issue of fault, we have to pragmatically come up with a way to compensate the people who have been injured in an equitable and timely manner, and share the cost on the most reasonable basis that we can determine, that is basically what we are proposing.

I do not think there is anything magic about 50 percent. I do think that there is something absolutely essential and equitable about having a major Government participation, for the reasons that I mentioned.

Senator NICKLES. Does it make sense to you that if we did have Government participation, that the Government's participation would be limited to only those employees who were directly involved in shipyards during World War II or something in that time frame?

Mr. ROSS. That is our general concept. That is the reason for the recommendation.

Senator NICKLES. But it is not in your proposal, as of today?

Mr. ROSS. It is not specifically stated as such, but the 50 percent is based on that kind of an assumption.

Senator NICKLES. Under the proposal that I have seen, am I correct to say there is not "limitation" of Government liability? Even if "your firm" had a continuous operation with asbestos, if an employee 20 years from now filed a claim from his exposure in 1984 through 1990, then the Government's contribution would have to come forward for that?

Mr. ROSS. Well, I think that would have to be a reassessment of the kinds of claims—rather, the sources of the claims that were coming in over time, periodically, I think in a period of 3 or 5 years we would have to look at the sources of the claims, as I said before, and if they are coming—for instance, the products that we make now, the asbestos is thoroughly encased within a plastic media, or something of that kind, such as a brake lining, or clutch facing, or something of that kind, it is not free to the air, where it can be breathed by people, and so forth.

So if the case should go in that direction, which I think is highly unlikely, for that reason, or some other direction, the composition of the financial support could be adjusted, according to the composition of the claims received at that time.

Senator NICKLES. I think you can see my reluctance for giving the Government that type of financial exposure, as well, not just for the past, but also for the present, and certainly for the future.

Mr. ROSS. Let me just make one other point, if I might, Senator Nickles.

I share your concern about excessive Government exposure, indeed. I would just like to say one factor in this bill is a sunset provision, which provides that if more than $300 million is paid out, and under our proposal, half of that might be paid out by the Government, so at one such point as the Government had paid out $150 million, the whole bill would come to an end, and there would be a reassessment by the Congress, as to whether they should go forward, whether the proportion should be the same, and so forth.

It is not like black lung, or something of that kind, which could go on and on, and explode, fantastic extent. There is a definite limitation in that respect proposed by our bill.

Senator NICKLES. To remind you, there was a definite limitation set on black lung, upon its inception, and also a definite "limits on Federal exposure financially" and the program is about $1.7 or $8 billion a year. It is supposed to be $40 million a year.

These programs have a tendency to grow, and to increase in cost, and exposure financially, as well as otherwise.

Mr. Ross, just one other question, so I will have a better feeling on Raymark.

You mentioned the potential exposure to your company alone was $870 million, is that pending cases?

Mr. Ross. No, what I said was that our company receives cases each month in which the amount claimed against us averages $870 million.

In other words, that means that each working day of the month our company is sued for an amount which is approximately equal to our entire net worth. That gives you an idea of the magnitude of the problem, the question of why are defense costs so high has been raised by plaintiffs' attorneys, who know a lot about high litigation costs, the reason is the threats to our company are dire.

Senator NICKLES. Let me try and get this correct. Your company has a net worth of $800——

Mr. Ross. $56 million.

Senator NICKLES. How much?

Mr. Ross. $56 million.

Senator NICKLES. $56 million is your company's net worth?

Mr. Ross. Which would be, I would say, $44 million higher, were it not for costs that we have had to pay in connection with asbestos litigation.

Senator NICKLES. You have how much in pending cases, or suits against your company, to date?

Mr. Ross. We have 16,000 suits. The amount of liability on those suits is astronomical, hundreds of billions of dollars.

Senator NICKLES. Hundreds of millions?

Mr. Ross. Billions.

Senator NICKLES. Hundreds of billions?

Mr. Ross. With a B. I do not have the precise number in mind, because it would boggle my mind if I did.

Senator NICKLES. Because you are a codefendant, your company is named in addition to countless other companies in each one of these suits?

Mr. Ross. Yes, usually 15 or 20 different codefendants.

Senator NICKLES. And you also mentioned that at the present time it takes about 5 years to settle a claim?

Mr. Ross. That is right.

Senator NICKLES. Do you see any change in that 5 years, getting longer or shorter?

Mr. Ross. I think it is staying about the same. It is approximately the same. It has lengthened recently, but it seems to be stabilizing at that point.

Senator NICKLES. You mentioned there are 16,000 claims against your company, and in your testimony you mentioned something about 25,000 claims?

Mr. Ross. There have been 25,000 claims, at least the estimates are that 25,000 claims have been filed against the industry, the codefendants, as a whole.

There have been between 20,000 and 21,000 claims filed against Raymark, of which 4,000 to 5,000 have been settled, or dismissed or tried, 71 cases have gone to court.

Senator NICKLES. And there have been a few cases where Raymark was not one of the codefendants?

Mr. ROSS. Thank God.

Senator NICKLES. Then you mentioned an estimate of up to 52,000 by the turn of the century; is that right?

Mr. ROSS. There have been studies made, many studies made, many estimates made, the most credible one, we think, estimates somewhere between 50,000 and 100,000 cases by——

Senator NICKLES. I think you mentioned the Rand study, and others, but we had testimony last week where people were talking about the potential number of victims, anywhere from 115,000 to 230,000 figures, either fatalities or totally disabled.

Mr. ROSS. Right. That is why I say there have been many studies made, and you have to look carefully into the credibility of these studies before you decide which ones you are willing to adopt.

In our case, we think the best estimates are those which show 50,000 to 100,000 cases by, say 2010.

Senator NICKLES. Gentlemen, thank you very much for your cooperation and assistance to the committee.

Mr. BALDWIN. Thank you, Senator.

Senator NICKLES. And we do have additional questions, and we would appreciate your response to those, as well.

Mr. ROSS. We will be glad to.

[The following was received for the record.]

Senator NICKLES. Your full statements and accompanying documents will be made a part of the record, also.

Mr. BALDWIN. Thank you.

Mr. ROSS. Thank you.

[The prepared statement of Mr. Ross with responses to questions of Senator Nickles and the prepared statement of Mr. Baldwin follow:]

Statement
of
FREDERICK J. ROSS

President and Chief Executive Officer
Raymark Corporation

on behalf of the
COMMITTEE FOR EQUITABLE COMPENSATION

concerning
COMPENSATION FOR OCCUPATIONAL
ASBESTOS-RELATED DISEASES

before the
Subcommittee on Labor
of the
Committee on Labor and Human Resources
United States Senate

April 30, 1984

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STATEMENT OF FREDERICK J. ROSS
SENATE LABOR SUBCOMMITTEE
APRIL 30, 1984

Mr. Chairman and Members of the Subcommittee:

My name is Frederick J. Ross. I am President and Chief Executive Officer of Raymark Corporation of Trumbull, Connecticut. I am here today to testify on behalf of the Committee for Equitable Compensation, which my company helped to establish almost a year and a half ago.

I want to thank this Subcommittee and its staff, and you in particular, Chairman Nickles, for extending this opportunity to testify.

INTRODUCTION

Although I shall speak only of asbestos, we all recognize that it is only one of a number of workplace materials associated with occupational disease. However, asbestos is truly unique in terms of the scope of the problem and the need for immediate action. Regarding other occupational diseases, you will undoubtedly hear witnesses caution you that scientific and other uncertainties make it premature to determine whether any response is called for. For asbestos, however, the problem is immediate and compelling, and the only remaining issue is how best to structure a solution.

Raymark, like other asbestos-product manufacturers, confronts an enormous problem whose genesis is historical but whose impact is current and immediate. In recent years, Raymark's research effort has enabled it to reduce its reliance on asbestos.[1] Nevertheless, products manufactured by other employees and other managements decades ago -- even though they often represented only a tiny fraction of our total sales -- have come back to haunt us, in the form of thousands of disease claims that are inundating the courts and threatening our future.

The number and complexity of these claims and the huge economic, social and legal problems they have spawned represent a national tragedy. Existing mechanisms are simply incapable of providing prompt and equitable compensation for asbestos-related diseases. Moreover, the compensation they do provide comes at a price in transaction costs that no one can afford to bear: not the manufacturers or their insurers, not the public, and certainly not the disease victims.

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[1] Raymark manufactures and markets friction materials for brake and transmission systems utilized in cars, trucks, buses, tractors and construction equipment. Although there are some applications where no substitutes have yet been found, Raymark has successfully developed numerous asbestos-free products. The asbestos-containing products we manufacture today employ encapsulated asbestos fibers that are generally believed to pose little or no health risk.

The Committee for Equitable Compensation was founded in the fall of 1982 for the purpose of furthering and supporting congressional and other efforts to develop an equitable system of compensating victims of diseases associated with exposure to asbestos. Our thirteen members[2] are companies concerned with the asbestos compensation issue, principally current or former manufacturers of products that contain asbestos. Our membership does not include any of the companies undergoing Chapter 11 reorganization.

The members of our organization are exploring all reasonable avenues that might help resolve the dreadful national crisis surrounding asbestos compensation. We are doing what we can to resolve at least some of the difficulties through non-legislative means -- including establishment of a facility to provide privately negotiated, non-judicial settlements; and possibilities of using the ongoing bankruptcy proceedings involving the Manville Corporation as a forum in which at least some of the problems can be aired.

For example, you may have read in the newspapers recently about the efforts of some of the asbestos manufacturers and some of the insurers to establish an improved process for reviewing and settling asbestos health claims. If successful, such approaches could reduce some of the enormous cost and delay of the present litigation. However, we believe that federal legislation can provide a comprehensive solution to all aspects of the asbestos compensation crisis.

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[2] The present members of the Committee for Equitable Compensation are: Babcock & Wilcox Company; Celotex Corporation; Eagle-Picher Industries, Inc.; Fibreboard Corporation; Flintkote Company; Keene Corporation; Lac d'Amiante du Quebec, Ltee.; Owens-Corning Fiberglas Corporation; Owens-Illinois, Inc.; Pittsburgh-Corning Corporation; Raymark Corporation; Rock Wool Manufacturing Company, Inc.; and Southern Textile Company.

The primary effort of our organization is to support and assist with congressional initiatives to establish a national program for prompt and equitable compensation for those suffering from asbestos-related diseases. It is for this reason that we are particularly pleased to appear before you today.

I. THE NATURE OF THE PROBLEM

Senator Nickles, it has been almost two years since UNR Industries became the first major manufacturer to be driven into bankruptcy by the asbestos litigation, followed soon thereafter by Manville and Amatex. Our companies have testified at numerous congressional hearings to discuss this increasingly critical situation, including a joint appearance by John Baldwin and myself before the House Labor Standards Subcommittee about a year ago.[3] Now yet another year has gone by, and, frankly, time is running out.

The difficulties faced by an already overburdened civil justice system, and by the claimants who must depend upon it, and by our companies that must pay for it, have continued to mount:

- Over the past year since my appearance before the House Subcommittee, approximately 6,000 new asbestos health claims have been filed against Raymark and other companies, bringing the total to more than 25,000 claims.[4] Because of the long latency period for asbestos diseases, we anticipate a steady stream of new claims for decades to come. One study has estimated that the total will probably exceed 52,000 claims by the early years of the next century.[5]

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[3] Hearing before the Subcomm. on Labor Standards of the House Comm. on Education and Labor (the "House Labor Standards Subcomm."), 98th Cong., 1st Sess., on H.R. 3175 (June 13, 1983).

See also Statement on behalf of the Committee for Equitable Compensation presented by John L. Baldwin at Hearing before the House Labor Standards Subcomm., 98th Cong., 1st Sess. (Feb. 10, 1983); Statement on behalf of Raymark Corporation presented by Kenneth R. Feinberg at Hearing before the Subcomm. on Courts of the Senate Comm. on the Judiciary, 97th Cong., 2nd Sess. (Serial J-97-150, Nov. 10, 1982); Statement of the Asbestos Compensation Coalition ("ACC") submitted to the House Labor Standards Subcomm., 97th Cong., 2nd Sess. (Sept. 9, 1982); Letter on behalf of the ACC submitted by William C. McLaughlin to Hon. George Miller on May 4, 1982; Statements on behalf of the ACC presented by William C. McLaughlin, G. Earl Parker, John L. Baldwin, and Victor L. Drexel at Hearing before the House Labor Standards Subcomm., 97th Cong., 2nd Sess. (April 21, 1982).

[4] Almost all of the suits were instituted not by our own employees, but by the employees of other companies, on various theories of product liability. This staggering number of lawsuits does not include workers' compensation claims filed against our companies.

- As each month goes by, new plaintiffs seek damages from Raymark totalling about $870-million. In January of this year, claims seeking $1.06-billion were filed against Raymark. In the face of such claims, we have no choice but to defend ourselves vigorously. In 1983, Raymark and its insurers had to spend nearly $10-million to fund its legal defense.

- Of our enormous expenditures over this period, well over half has been received by defense lawyers and plaintiffs' lawyers, not by the claimants at all. The Rand Corporation has estimated that, of every dollar spent by asbestos manufacturers and their insurers in cases that have been closed, claimants receive about 39 cents.[6] In cases where the total recovery is lower than average, the claimant actually receives less than 20 cents for every dollar expended.[7] If the present system continues, we conservatively project that fees exceeding $5-billion dollars will eventually be received by a limited number of law firms.

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[5] Based on an epidemiological study commissioned by the Manville Corporation. Prior to its filing under Chapter 11 of the U.S. Bankruptcy Code, that corporation projected a total of more than 52,000 lawsuits by the year 2010. See The Manville Bankruptcy and the Northern Pipeline Decision, Hearing before the Subcomm. on Courts of the Senate Comm. on the Judiciary, 97th Cong., 2d Sess. 24 (Serial J-97-150, Nov. 10, 1982); Oversight Hearing on the Effect of the Manville and UNR Bankruptcies on Compensation of Asbestos Victims: Hearing Before the Subcomm. on Labor Standards of the House Comm. on Education and Labor, 97th Cong., 2d Sess. 53-56 (Sept. 10, 1982).

[6] See Kakalik et al., Variation to Asbestos Litigation Compensation and Expenses, at xix-xx (prepublication executive summary, #R-3132-ICJ, Rand Corp., April 1984) (presented at hearings before this Subcommittee on April 24, 1984).

[7] Id. at xix.

The scale and complexity of the problem has plainly overwhelmed the capacity of existing compensation mechanisms. When it comes to compensating asbestos disease victims, the tort system has quite simply broken down.

A. Unfairness to Current Claimants

Mr. Chairman, this tragic breakdown of the tort system serves no one well -- certainly not the disease victims themselves. Persons in immediate need are often forced to wait many years before obtaining any decision on their claims. At Raymark it often takes us 5 years to resolve an asbestos claim in the courts.

Furthermore, unpredictable jury awards can reward one claimant handsomely, while providing equally meritorious claimants little or nothing. Legal technicalities prevent recovery by many others.

As one poignant example, Richard J. Hogard and Robert L. Hance were insulation workers in the same shipyard at Long Beach, California, in the 1960's. Hogard claimed to have been disabled by asbestosis, sued for compensation in California, and was awarded $1-million by the jury. I have heard that Hance also claimed to have been disabled by asbestosis, sued in Wyoming, and was awarded nothing.

The Chapter 11 filings of the Manville Corporation, UNR Industries, Inc. and Amatex Corp., have confronted present disease claimants with the prospect of even greater delays and more uncertainty. Just how and when these claims against the filing companies will ever be resolved -- and for how many cents on the dollar -- is anybody's guess.

B. Enormous Litigation Costs

The bulk of the disease compensation awarded to a valid claimant actually goes not to pay for the claimant's support and medical expenses, but to pay for the legal fees and court costs the claimant has incurred in litigating the claim.

Indeed, comparing the amounts actually realized by asbestos claimants with the overall costs of litigating their claims vividly illustrates the huge drain on all our resources that the costs of litigation represent. In 1983, Raymark and its insurers spent nearly $10-million just in legal defense fees in connection with the litigation of asbestos disease claims.

Of the 56 cases tried to verdict since January 1, 1982, Raymark won 32. These courtroom victories were in some sense Pyrrhic, however, because the combined cost to Raymark and its insurers for litigating these cases was nearly $1.5-million! Based on these figures, if Raymark and its insurers were to go to trial on each of the 19,653 pending claims in which we have been named as a defendant,[8] our combined costs would amount to $750-million -- even if we won every single case! It is true that efforts to streamline litigation have recently resulted in some savings per case in defense costs, but since the number of filings continues to multiply, aggregate costs have continued to rise.

The defense of litigation absorbs time and effort -- in addition to dollars -- that could more usefully be put to other worthwhile purposes, including the development of asbestos-free products and the compensation of disease victims. As things now stand, many top executives devote their full time and attention to supervising litigation rather than to overseeing their companies' business futures.

C. Inability To Collect Insurance

Compounding the failure of the existing system, some insurance carriers have refused to pay asbestos claims until ordered by a court to do so. As a result, many manufacturing companies that paid millions of dollars in insurance premiums over the years cannot obtain the benefits of their insurance policies until after the completion of protracted and very expensive litigation.

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[8] Of the 25,087 claims in which Raymark has been named as defendant, 19,653 are now pending, the remainder having been concluded by settlement or judgment.

There are more than forty major cases being litigated around the country on the question of which insurance policies should cover losses resulting from asbestos-related disease. With regard to Raymark's case in Cook County, Illinois, the initial decision has been favorable to Raymark,[9] but the litigation of just this one lawsuit will cost Raymark about $1-million, exclusive of appeals. We can only assume that the seven insurance companies involved in this lawsuit have also spent large amounts in litigating this dispute.

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[9] In November, the Cook County, Illinois, Circuit Court issued an order that requires our primary insurance carriers with unexpended coverage to assume the liability and defense costs of all pending and future asbestos-related litigation. This is an interim funding arrangement, expected to continue until a final order is entered by the court. Zurich Ins. Co. v. Raymark Industries, Inc., No. 78 L 8760, Nov. 25, 1983 issue Asbestos Lit. Rptr. (Andrews Publications) at 7247 (Cook Co., Ill., Nov. 18, 1983).

Prior to the November order, Raymark had been forced to absorb a substantial portion of the costs associated with asbestos litigation. The company's share was $6.7-million in 1983 and $7.5-million in 1982.

This order was issued subsequent to a preliminary decision by the same court in late September, which, when final and if affirmed by appellate courts, will open the door to almost $400-million-worth of coverage provided under policies purchased continuously since 1941. Zurich Ins. Co. v. Raymark Industries, Inc., No. 78 L 8760, Oct. 13, 1983 issue Asbestos Lit. Rptr. (Andrews Publications) at 7247 (Cook Co., Ill., Sept. 1983). Conflicts among the various insurers as to which carriers would be liable for asbestos litigation costs had previously limited our access to this pool of coverage. There remain certain collateral issues which should be decided by mid-1984, when we expect a final order to be entered. This final decision may be appealed, a process which would last two or more years.

Possibly the worst aspect of the ongoing insurance disputes is their promise to continue. Despite the standardized language used in nearly all of the liability insurance policies issued during the relevant time periods, various courts have applied the same language in different ways. It is doubtful whether full uniformity of interpretation can ever be achieved in the courts.

D. Financial Uncertainty For Business Operations

Furthermore, the enormous uncertainties and delays under the existing tort system prevent us from being able to accurately plan our financial future. This uncertainty derives not only from our inability to predict the outcome of tens of thousands of lawsuits or the number of claims that will be filed in the years to come, but also from the ongoing insurance disputes that I just described.

Indeed, in Raymark's case, independent accountants give only qualified approval to our balance sheets. These developments have made it extremely difficult for Raymark to raise capital from the debt or equity markets.

Mr. Chairman, no member of the Committee for Equitable Compensation has filed under Chapter 11, and none, to my knowledge, intends to. Raymark itself is determined to avoid the shelter of the bankruptcy court. Because of the Chapter 11 filings by Manville, UNR, and Amatex, however, our existing commercial creditors demanded and received new and additional security for their loans. This newly-demanded security limits the assets available to benefit future disease claimants, generates still more expenses and legal costs, and also adds 1.5 points to the interest rate that we must pay.

E. The Threat to Future Victims

Ultimately, Mr. Chairman, as our assets become further eroded, those most at risk are the workers whose diseases will not develop until future years. As I have already emphasized, the massive litigation diverts both financial resources and attention from business operations whose continuity is essential for the payment of these claims. Certainly in Raymark's case, the multiplication of financial uncertainties has meant that an increasing proportion of our company's assets are pledged to our commercial creditors and would be unavailable to pay future disease claims.

Three companies are already in Chapter 11. If the present situation continues, I leave it to your wisdom, Senator Nickles, to anticipate who may eventually be left to pick up the tab for these future claimants.

II. THE NEED FOR A LEGISLATIVE SOLUTION

Perpetuation of the status quo, with its steady depletion of these necessary resources, cannot be tolerated. But what does the corporate officer, who inherited this crisis, do to meet his obligations, not only to asbestos victims and their families, but to the corporation's shareholders and employees?

A. Options

What are the options available to us? As I see it, we could either do nothing, seek to develop non-legislative mechanisms, enact federal product liability legislation, or establish a no-fault compensation program for asbestos.

1. Do nothing. Some have argued that we should do nothing. But those who advocate this position are not those who are confronted by the problem. The status quo -- with its steady depletion of corporate resources needed to pay claimants, while bringing millions of dollars into a limited number of law firms -- simply cannot continue.

2. Non-legislative mechanisms. A second option is to attempt to resolve at least some of the controversy through non-legislative mechanisms. As I noted earlier, we are committed to doing what we can through such efforts.

3. Federal product liability legislation. A third option is to reform the substantive tort law. But such a re-

form, while warranted, would not have a significant effect, overall, on the asbestos litigation.

It is important to understand what product liability reform can -- and cannot -- do regarding asbestos. S.44, Senator Kasten's product liability bill, which was recently reported favorably by the Senate Commerce Committee, would have the following principal effects on the asbestos litigation:

- Increased uniformity and predictability in the product liability system.

- The statute of limitations and statute of repose would allow additional asbestos claims to be filed in several states.[10]

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[10] S.44 would establish a "discovery rule" form of statute of limitations, preserving the right of some asbestos victims to sue in several states where their claims would be barred today. Under section 14 of S.44, a civil action will not be barred if it is --

> "filed within two years of the time the claimant discovered or, in the exercise of reasonable prudence, would have discovered the harm and its cause."

By way of contrast, the New York statute begins to run as soon as a person is "injured," see Steinhardt v. Johns-Manville Corp., 54 N.Y.2d 1008, 430 N.E.2d 1297, 446 N.Y.S.2d 244 (1981); and the Virginia statute begins to run at the time the disease first developed, see Locke v. Johns-Manville Corp., 221 Va. 951, 959, 275 S.E.2d 900, 905 (1981). Because asbestos-related diseases develop over a period of many years, such rules cut off many claims before the victim either knows or has reason to know of the harm and its cause.

S.44 also provides that its statute of repose, which ordinarily terminates the right to bring suit after 25 years, does not apply to latent injury such as caused by asbestos.

(Footnote continued)

- A rule imposing liability on the basis of what manufacturers should reasonably have known about asbestos risks, which is similar to the rule in all jurisdictions but one (New Jersey), and which would affect the outcome of few, if any, asbestos cases even there.[11]

Thus, S.44 would actually increase the number of asbestos tort claims that would be filed. By establishing uniform rules for the 51 jurisdictions, the bill might facilitate some settlements and reduce some litigation costs for asbestos claims. However, it would not address the fundamental problems of the asbestos litigation.

For ordinary product-liability cases -- involving, for example, an individual defective machine, an instant,

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(Footnote 10 continued from previous page)
This is a more victim-oriented rule than that which applies now in some states. See, e.g., O'Connell v. Keene Corp., No. 81 C 7306 (N.D. Ill. Sept. 7, 1982) (applying Illinois law, which extinguishes strict product liability actions after 10 years, cutting off an asbestos health claim).

[11] Most asbestos claims are based on the manufacturers' failure to warn. In 50 of 51 jurisdictions, there is in one way or another a requirement of proof that the defendant knew or had reason to know about the risk of asbestos harm before liability can be imposed. S.44 would retain such a requirement. One state, New Jersey, has imposed "absolute liability" on the manufacturers of asbestos. They will be liable even though they neither knew or had any reason to know about asbestos risk. See Beshada v. Johns-Manville Products Corp., 90 N.J. 191, 447 A.2d 539 (1982). S.44 would serve to replace this rule of "absolute liability." However, the New Jersey rule has not been adopted by any other state, and the rule of absolute liability would affect the outcome of few, if any, asbestos cases even in New Jersey.

identifiable injury, and clearly identifiable parties and manufacturers -- establishing simplified and uniform rules, as S.44 is designed to do, should make settlement or litigation significantly quicker and more efficient. However, an asbestos-related case presents complications that product liability reform simply cannot address.[12] And even beyond the question of expense and delay in resolving each individual claim, S.44 could do nothing about the enormous burden on our courts and our companies posed by the sheer number of existing claims and by the insurance litigation. Thus, even if S.44 were enacted, the economic crush of the vast number of existing claims, including the tremendous legal and other costs in resolving them, could still result in the worst of all worlds -- insolvent product sellers and uncompensated claimants.

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[12] Generally, asbestos health claims --

- are not brought until 20-40 years after exposure to asbestos fibers;
- in many cases, involve insulation workers who were employed by several companies over a period of years;
- involve employers who purchased asbestos from several suppliers over a period of years, thus creating uncertainty as to which suppliers are responsible for a claimant's harm;
- involve suppliers each of whom purchased insurance from several insurers during the years they mined, imported, or manufactured asbestos or asbestos-containing products, thus creating uncertainty as to which insurer is liable for a claimant's harm.

Typically, an average of sixteen corporations are named as defendants in each asbestos suit; each of these corporations has ordinarily been insured by several insurance carriers; and the key events occurred decades in the past. Thus, even if damages and causation are clearly established, determining the responsible defendants and their share of the damages is very difficult and costly. S.44 could not significantly reduce these problems.

4. No-fault administrative system for asbestos. The fourth option is to provide a no-fault administrative compensation system to replace the existing litigation. Such an option is needed now for asbestos, and this is the option that we support.

B. Necessary Elements of a No-Fault Legislative Solution

The Committee for Equitable Compensation believes that any comprehensive legislative solution must meet ten fundamental objectives:

First, the program must pay an adequate benefit.

Second, claims must be processed and paid promptly.

Third, claims must be determined on a no-fault basis if the enormous litigation costs and delays are to be avoided.

Fourth, the program must totally eliminate tort litigation and provide an exclusive remedy.

Fifth, all responsible parties -- including businesses, their insurers, and the federal government -- must contribute to the program's funding.

Sixth, the program must be affordable, and parties' obligations must permit sound financial planning and funding.

Seventh, claims must be decided on the basis of the best medical evidence and expertise.

Eighth, administrative costs must be strictly limited.

Ninth, new bureaucracies must be avoided.

Tenth, the program must operate with minimum interference in state workers' compensation programs.

Although bills have previously been introduced in both houses of Congress, none of them meets all of these criteria. We therefore would strongly urge that you and your Senate colleagues now develop sound legislation to address the problem of asbestos disease compensation.

Chairman Nickles, I believe you are aware that our Committee has prepared a draft legislative proposal, which we have shared with your Subcommittee staff.[13] While we are certainly not wedded to any particular concepts, and believe our own approach still needs further refinement, ours is the best

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[13] The "Asbestos Workers' Recovery Act" ("AWRA") is a legislative proposal to establish a no-fault program to compensate victims of occupational asbestos-related disease. The new program would replace the tort system, while leaving existing workers' compensation systems intact. The AWRA is proposed by the Committee for Equitable Compensation and its 13 member companies, with the active support of Manville and the other members of the Asbestos Compensation Committee (Unarco and Amatex).

The AWRA can be summarized by identifying its ten key fea-

(Footnote continued)

(Footnote 13 continued from previous page) tures:

i. Asbestos Only, and Occupational Only. There has been a unique problem involving asbestos, and our proposal would have no implications for other chemicals or other kinds of occupational disease. The proposal would address only occupational exposures, because almost all of the claims have involved this sort of exposure -- that is, exposure of workers on the job, or, in a few cases, exposure of family members to asbestos brought home on work clothing.

ii. No-Fault. To avoid the costs, delays, and inequities in the present litigation, the claimant would not be required to show negligence or fault, or be required to demonstrate what company manufactured the product causing exposure.

iii. Supplements Workers' Compensation. While replacing tort litigation for asbestos, the new benefits program would supplement, not supplant, existing workers' compensation mechanisms.

iv. Equitable Payment. The program must provide a prompt, equitable payment to claimants. To provide an equitable substitute for the tort remedy, we propose a benefit roughly equal to the average net tort award received by plaintiffs.

v. Reliance on Workers' Compensation Determinations. Eligibility for the supplemental benefit will generally conform to prior findings and decisions made by the workers' compensation agency -- eliminating the need for a new federal bureaucracy that would prejudge or second-guess state compensation determinations.

vi. National Medical Panel. A panel of medical scientists would be established, to determine what diseases can be caused by asbestos, and can therefore be the basis of a claim for a supplemental benefit.

(Footnote continued)

we have seen so far -- and we hope that this Subcommittee will consider our ideas as you develop your proposal to solve this terrible problem facing us all.

III. ISSUES DESERVING PARTICULAR ATTENTION BY THIS SUBCOMMITTEE

Before closing, I would like to discuss a few issues that I believe are fundamental to the development of any legislative solution.

(Footnote 13 continued from previous page)

vii. Funding through an Asbestos Suppliers' Trust Fund. Defendants in the litigation who supplied asbestos products would pay assessments into a Trust Fund, from which supplemental benefits would be paid.

viii. Participation by the Federal Government. Because of its key role in the supply and use of asbestos products, particularly for shipbuilding during the 1940's and '50's where about half of the asbestos injuries took place, the United States would pay a 50% share of Trust Fund costs, and private suppliers would pay the other 50% share.

ix. Role of Insurance. The asbestos suppliers would be able to call upon existing insurance policies, up to the established policy limits, to cover obligations to the new program.

x. Exclusive Remedy. In return for funding the supplemental benefits under the new program, no tort litigation would be permitted against the asbestos suppliers, including the United States, or their insurers.

A. Uniqueness Of Asbestos

The legislation we are discussing should apply only to asbestos. Unlike some other substances, asbestos is clearly associated with specific medical disorders, and the breakdown in the civil justice system regarding asbestos is truly unique and unprecedented. No other substance or kind of occupational disease has come close to generating the massive amount and complexity of litigation that we face regarding asbestos. Indeed, the American Bar Association -- the most prominent spokesman for our nation's lawyers -- has called this problem a "catastrophic phenomenon on a national scale to asbestos workers and the asbestos industry," and the ABA now favors "appropriate federal legislation to establish methods to provide adequate compensation" to those suffering from asbestos-related diseases.[14]

B. Federal Government Responsibility

A second point involves the program's funding. The United States served as a more than equal partner with private industry in the government's shipbuilding program during World War II and the Korean Conflict. The government should therefore now share with its industrial partners the financial burden of the resulting asbestos health tragedy.

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[14] Recommendations to the House of Delegates by the ABA Special Committee to Study Product Liability ¶ II (1983), approved by voice vote at the ABA Mid-Year Meeting in New Orleans (February 1983).

The majority of existing asbestos claims have arisen from exposure in the wartime shipbuilding effort. Indeed, at my company Raymark, over seventy percent of the claims derive from such shipyard exposure. And the government played a leading role in the use of and excessive exposure to asbestos in wartime shipbuilding. A few stark facts illustrate this critical role:

- In ships constructed or refurbished during the war years, the government required use of enormous quantities of asbestos, specified by name.

- The United States directly employed over 1 million shipyard workers; and at both government and private shipyards, the federal government assumed control of workers' health and safety and closely supervised every aspect of the operation.

- The government itself imported large amounts of asbestos fiber and it stockpiled, allocated, and sold the fiber and other asbestos products to private suppliers and construction companies.

- Throughout the war years, the federal government was well aware that human exposure to asbestos at the shipyards could cause lung disease, yet for more than 40 years the government has continued to expose hundred of thousands of workers to excessive and dangerous concentrations of asbestos dust.

Let me explain these points in greater detail. (For a thoroughly detailed discussion of the government's role in the wartime shipbuilding effort, I refer you to my testimony before the House Labor Standards Subcommittee.[15])

1. Federal Involvement In Wartime Shipbuilding

(a) Size of the program. The dramatic surge in asbestos consumption in this country in the 1940's can be traced to the federal government's breakneck, no-holds-barred program for the construction of ships to outfit this country's Navy and Merchant Marine during the war years.[16] More merchant and naval vessels were built from 1940 to 1945 than in the whole previous history of shipbuilding in the United States.[17]

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[15] See supra, note 3.

[16] An average of 465,000 short tons, more than double the average annual tonnage used in the 1930's, were consumed in each year from 1940 through 1949. Figures calculated from United States Department of Interior, "Bureau of Mines Minerals Yearbook, 1972: Asbestos" at 4, Table 3 (1973).

[17] See Smith, H.G. and L.C. Brown, "Shipyard Statistics" in 1 The Shipbuilding Business in the United States of America 122-123, Tables 45, 46 (F.G. Fassett, Jr. ed. 1948) hereinafter cited as "Shipyard Statistics"; Fischer, G.J., "A Statistical Summary of Shipbuilding Under the U.S. Maritime Commission During World War II," Historical Reports of War Administration, U.S. Maritime Commission, No. 2, Table B-1 (1949).

Employed in this crash program were some 4.5 million workers.[18] Of the 27.5 million workers estimated to have been exposed to asbestos since 1940, 11.2 million -- or about 40% -- are thought to have been exposed during the 1940's,[19] when ship construction was at its peak.

(b) Government-mandated use of asbestos. Every ship constructed or refurbished during the war years made extensive use of asbestos products. Asbestos is resistant to heat, fire and electricity; it is also strong and versatile. For these reasons, asbestos was used to insulate a wide range of shipboard products -- from bulkheads to electrical cable, from flooring to clothing, and from table tops to cement. Raymark (then known as Raybestos-Manhattan, Inc.) produced a series of asbestos-containing products as part of this war effort, including heat-resistant cloth, tape and thread, and asbestos blankets for engine room safety.

All these shipboard asbestos products -- including Raymark's and those of other manufacturers -- were produced to government specifications. These specifications did not simply require the use of materials with some of the useful properties peculiar to asbestos; in the vast majority of cases the government required asbestos by name, regarding all other materials as inferior. Only by the use of asbestos could manufacturers meet the standards set by the government.

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[18] See Selikoff, I.J., "Disability Compensation for Asbestos Associated Disease in the United States," Report to the U.S. Department of Labor, Contract No. J-9-M-8-0165, at 120, Table 2-12 (June 1981). See also Hogan, M.D. and D.G. Hoel, "Estimated Cancer Risk Associated with Occupational Asbestos Exposure," in 1 Risk Analysis 68 (1981) (estimating 4.3 to 5.4 million shipyard employees.)

[19] Selikoff, supra note 18, at 120, Table 2-12.

In addition to the common use of asbestos specifications,[20] on a number of occasions during the war the government actually changed its "specs" to require asbestos-containing products, having concluded that alternatives were unsatisfactory.[21] It is also widely recognized that certain novel shipboard asbestos applications were developed upon the government's direct request.[22]

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[20] A still better idea of the overall prevalence of asbestos specifications for shipboard products can be gleaned from the U.S. Maritime Commission's standardized ship designs during that period. In the case of a single-screw tanker, for example, those designs specified asbestos for insulation for all of the following: overhead steel decks and walls exposed to weather; the ship's furnace; all piping for the ship's heating system, and the ship's generating plant propulsion system. U.S. Maritime Commission, Design T-2SE-A1, at 41, 61-62, 78-75.

[21] See Letter from Commandant, Navy Yard, Boston to Bureau of Ships, 559 (MEFX 1/28) (January 20, 1943); Letter to Commandants of all Navy Yards, Supervisors of Shipbuilding and Industrial Managers, from Chief of the Bureau of Ships, S 39-1 (3648) (Oct. 15, 1942).

[22] One such product was "marinite" board, used as fireproofing for bulkheads, that was developed by Johns-Manville at the request of George Sharp, Chairman of a Senate Subcommittee involved in the investigation of the burning and sinking of the ship "Morro Castle" off the coast of New Jersey. Deposition of Burton Tower, February 26, 1979, Vol. I, tr. 27-

(Footnote continued)

(c) Government responsibility for the health and safety of the workforce. During the war years, the United States directly employed approximately 1.1 million military and civilian shipyard workers -- roughly 25 percent of the total employed in all of this country's shipyards during the war.[23]

Equally important, however, the federal government controlled the employment of many thousands of other shipyard workers who labored under the close and immediate federal supervision made necessary by wartime conditions. When our country was at war, civilians -- as well as servicemen -- took their marching orders from the government. And the more closely an activity was related to the war effort, the more complete and pervasive was the government's control of that activity.

In almost every relevant aspect, the federal government employed the workers who labored in the private shipyards, just as surely as the federal government employed the sailors and seamen who crewed the ships when they were

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(Footnote 22 continued from previous page) 14 to 27-23 (on file with Raymark Corporation). (Mr. Tower was employed by Johns-Manville until 1938 and by the U.S. Maritime Commission from 1938 to 1951). See S. Rep. No. 184, 75th Cong., 1st Sess. (1937) ("'Morro Castle' and 'Mohawk' Investigations").

[23] This estimate is based on both government and private sources. "Shipyard Statistics," supra note 17, at 189; U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Earnings, United States, 1909-71" 276.

launched. The government took on such traditional management functions as determining how many employees to hire, participating in labor negotiations on wages, hours and working conditions, and supervising, on a daily basis, every aspect of the construction operation.[24]

Nor was the extent of this supervision limited to the yards where the ships were built. Companies -- like Raymark -- who supplied the asbestos products demanded by the government, were subject to a continuous and close supervision. Federal inspectors were a regular presence in our plants in Stratford (Connecticut), Passaic (New Jersey), Manheim (Pennsylvania) and North Charleston (South Carolina) during that time.

The federal government, furthermore, was responsible for safety inspections and compliance with basic government standards for worker health and safety that applied to these construction projects.[25] Those basic standards, which were to be implemented by the private employer, included specific recommendations of requirements with respect to the handling of asbestos materials.[26] Recognizing that strict adherence to the standards might prove impracticable under wartime conditions, the government itself took something less than a stringent attitude toward the enforcement of such standards.[27]

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[24] Lane, F.C., Ships for Victory -- A History of Shipbuilding Under the U.S. Maritime Commission in World War II, 268-87, 482-85, 663-70 (1951) hereinafter cited as Ships for Victory.

[25] General health and safety standards for contract shipyards were promulgated in 1943. United States Navy, United States Maritime Commission, "Minimum Requirements for Safety and Industrial Health in Contract Shipyards" (1943) hereinafter cited as "Minimum Requirements".

(d) Government participation in the asbestos market. The government's dominating influence over the use of asbestos extended to its control over the raw material itself. Realizing the strategic importance of asbestos, the government began, just before the war, to stockpile raw asbestos fibers.[28] The tonnage purchased by the government steadily

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[26] Id. at 9.

[27] At the first meeting of a conference on Shipbuilding Health and Safety held in Chicago on December 7, 1942, Daniel S. Ring, Director of Shipyard Labor Relations for the U.S. Maritime Commission, advised the conference of precautions to take concerning asbestos, but then added that:

> Those sort of air analyses and checks need not be done often. We do not want to wish a needless chore on you that will interfere with more important duties for the safety engineer, and above all the last thing we want is to put through any restrictions that will slow up the shipbuilding program.

See Occupational Health Hazards Compensation Act of 1982: Hearings on H.R. 5735 Before the Subcomm. on Labor Standards of the House Comm. on Labor and Education, 97th Cong., 2d Sess. 254 (1983) hereinafter cited as Health Hazards Hearings (statement of Victor L. Drexel, Corporate Counsel, Amatex Corp., as part of a panel representing the Asbestos Compensation Coalition).

[28] Plans to procure and stockpile asbestos were initiated as early as June 1940. Health Hazards Hearings, supra note

(Footnote continued)

increased throughout the war years, with 57,000 tons having been contracted for in 1942.[29]

Because of their unique characteristics, African asbestos fibers were in particular demand during the war. The government's stockpiling efforts moved a final step back in the chain of distribution in 1943, when the government itself became an importer of asbestos fibers, making purchases directly from African mining concerns.[30]

After the war broke out, rigid controls were placed on the non-military uses to which asbestos could be put. The first controls took the form of an asbestos fiber allocation system, under which suppliers were required to sell their stocks first to those who -- like companies in the shipbuilding industry -- were assigned the highest priority by the government.[31] Conservation orders were later issued that prohibited some asbestos uses and reserved certain African asbestos

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(Footnote 28 continued from previous page)
27, at 253 (statement of Victor L. Drexel, Corporate Counsel, Amatex Corp., as part of a panel representing the Asbestos Compensation Coalition).

[29] See Bowles, O., "Asbestos, A Materials Survey," Bureau of Mines Information Circular 7880, at 75 (1959).

[30] See United States Department of Interior, "Bureau of Mines Minerals Yearbook, 1942: Asbestos" 2 (1943).

[31] See Bureau of Demobilization, Civilian Production Administration, Industrial Mobilization for War: History of the War Production Board and Predecessor Agencies 171-84 (1947).

fibers specifically for naval and maritime uses.[32] Ultimately, all asbestos textile products were placed under a general allocation scheme, through which the federal government directly allocated and scheduled output.[33] During the Korean conflict, similar controls were exerted over asbestos suppliers and shipyard production.[34]

Both during the war and thereafter, tons of the fiber stockpiled by the federal government were sold for use by contractors and subcontractors to make the products to which employees were exposed at shipyards and manufacturing plants. The federal government was, in fact, a major source of supply for the disease-producing raw materials.

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[32] See, e.g., Office of Production Management Conservation Order M-79 Curtailing the Use of Certain Types of Asbestos (January 20, 1942), reprinted in Bowles, supra note 29, at 76-77. South African fiber imports could be processed only for priority "Defense Orders," while certain chrysotile and amosite fibers were restricted to use for certain Navy specification and maritime insulation Defense Orders. Id. SS 1064.1(a)(1), and (a)(2).

[33] War Production Board Conservation Order M-123 -- Asbestos Textiles (March 30, 1942) had restricted the sale of asbestos textiles and asbestos-containing packings. These restrictions were combined with Conservation Order M-283 (1943) which placed asbestos textiles under the complete allocation procedure. Bowles, supra note 29, at 75-76, 82-84. See also Health Hazard Hearings, supra note 27, at 253-54 (statement of Victor L. Drexel, Corporate Counsel, Amatex Corp., as part of a panel representing the Asbestos Compensation Coalition).

[34] See National Production Authority Order M-96--Spinning Grades of Chrysotile Asbestos Fiber (January 17, 1952), reprinted in Bowles, supra note 29, at 93-94.

(e) *Post-war asbestos use*. Despite the government's knowledge throughout the 1940's of the asbestos problem, the United States continued to require the use of asbestos in a very large number of its shipboard products at least until 1975.[35] One asbestos manufacturer actually closed one of its plants when the government would not accept a substitute for asbestos-containing products.[36] Although the government's asbestos-demand policy began to change in 1971,[37] many specifications remained unaffected until 1975 or 1976,[38] and the government continued to purchase and use supplies of asbestos-containing materials throughout the 1970's.[39]

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[35] NAVSEA Instruction 5100.2 (Oct. 24, 1975). Previous Navy directives had been aimed only at the elimination of high asbestos-content thermal insulation materials and at the implementation of industrial hygiene measures. *See* NAVSHIPS Notice 9390 (Feb. 23, 1971); NAVSHIPS Instruction 5100.26 (Feb. 9, 1971).

[36] GAF Corp. has asserted that its decision to close its Calsilite insulation manufacturing plant in 1971 "was based, among other things, on the Navy's refusal to adjust its mandatory specifications to approve an asbestos-free Calsilite which GAF had developed. . . ." *See* *GAF Corp. v. United States*, No. 287-83C (Ct. Cl. complaint filed May 5, 1983), *reprinted in* May 13, 1983 Asb. Lit. Rptr. (Andrews Publications, Inc.) 6615, 6618.

[37] The Navy first acted to discontinue the use of certain high asbestos-content thermal insulation products in 1971, apparently in response to a communication a year earlier from Admiral Hyman Rickover which expressed concern about the Navy's failure to act in the face of the known health problems associated with asbestos exposure. *See* NAVSHIPS Instruction 5100.26 (Feb. 9, 1971); Letter from Admiral Hyman Rickover to Commander, NAVSHIPS (Sept. 22, 1970).

[38] Not until 1975 was the use of all asbestos-containing products discontinued, NAVSEA Instruction 5100.2 (Oct. 24, 1975), and the "essential completion" of specifications and standards was not reported to have been accomplished until April 1976. Letter from Commander, NAVSEC, to Commander, NAVSEA (April 21, 1976).

The government has, in addition, continued to stockpile and dispose of asbestos fiber,[40] selling over 40,000 tons of fiber on an intermittent basis between 1948 and 1973, even apart from the astounding 6.4 million tons bought and sold during the two year period 1964-65.[41] Another 71,000 tons were released from the stockpiles during the period from 1970 through 1980,[42] including some that was sold to Raymark.[43]

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[39] Deposition testimony reveals that asbestos thermal insulation was still being used, for example, in the Norfolk Naval Shipyard as late as March 1977. Deposition of Larry Preston Hackler, January 26, 1978, Volume I, tr. 63-15 to 64-3 (on file with Raymark Corporation). (Mr. Hackler was director of the Norfolk Naval Shipyard Safety Office.) In addition, GSA was still buying asbestos cloth as late as August 5, 1977 -- cloth which apparently wound up in Naval applications. Letter from Christopher Colson, Raymark, to John Marsh, Raymark (August 5, 1977) (on file with Raymark Corporation). Certain asbestos-containing products, for which adequate substitutes have not yet been developed, are still being used today in Naval shipyards and other Naval facilities. Deposition of Allen Winer, Sept. 24, 1980, tr. 68-8 to 68-24 (on file with Raymark Corporation). (Mr. Winer has been a NAVSEC engineer since 1963.)

[40] According to the "Bureau of Mines Minerals Yearbooks," the government asbestos stockpile inventories totalled 121.2 thousand tons in 1965, 58.7 thousand tons in 1975 and 49.8 thousand tons in 1981.

[41] These figures are based on data compiled by the Manville Corporation from Federal Preparedness Agency documents.

[42] Figures compiled from U.S. Department of Interior, "Bureau of Mines Minerals Yearbook" Tables 1 and 2 (1974-1980).

[43] In 1980, at the request of the Department of Defense, President Carter signed an order releasing long fiber Rhodesian asbestos from the government stockpile to Raymark for production of asbestos cloth essential in the building of atomic submarines.

Indeed, the government tried, as recently as February 1983 to find a buyer for 9,300 surplus tons of asbestos fiber.[44] It should not surprise you to learn that the only submitted bid came up "far short" of what it would cost the government to remove the asbestos from its warehouse.[45]

In short, the government was a crucial participant in the asbestos market. Its role was obvious and direct. Indeed, no single actor played a more important role in promoting the development and use of asbestos products than did the federal government, and no single actor bears a heavier burden of responsibility for the tragedy of asbestos-related disease among American workers today.

2. Appropriate Congressional Response

In a situation like this, where injuries result from an enterprise conducted jointly by the United States and private industry to further a national objective, it is both fitting and consistent with precedent for Congress to recognize the government's share of responsibility, rather than leaving the government's industrial partners to bear the entire cost.

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[44] See General Services Administration, Federal Property Resources Service, "Solicitation of Offers for Asbestos: Amosite Asbestos -- 8,537 Short Tons, Crocidolite Asbestos -- 796 Short Tons, of South African Origin" (Feb. 7, 1983).

[45] See Isikof, M., GSA Tried to Sell Thousands of Tons of Asbestos Against Justice Advice, Washington Post, April 4, 1983, at A13.

Indeed, it is for Congress to decide when it is appropriate for the government to accept liability for government-caused injury.[44]

In special circumstances of government-caused widespread injury (or potential injury), Congress has stepped in to assume the government's share of liability. For example, when a major government project like the Teeton Dam in Idaho overflowed, Congress provided compensation for the victims. In other cases, Congress has agreed to indemnify its industrial partners who had undertaken potentially hazardous projects to further government objectives. Thus, Congress enacted the Price-Anderson Act to protect against injury in the development of nuclear power and the National Swine Flu Immunization Program Act to indemnify participants in a government-mandated vaccination program. As in these other special "joint ventures" between government and industry, Congress should accept the government's fair share of the liability for the damages wrought by occupational asbestos exposure.

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[44] Congress has recognized government responsibility in various ways. Until 1946, Congress assumed the obligation of paying for the government's torts by passing thousands of private bills. See Dalehite v. United States, 346 U.S. 15, 25 n.9 (1953). In 1946, to eliminate the clumsy private bill system, Congress enacted the Federal Tort Claims Act, which waived sovereign immunity for certain tort actions against the government. A waiver of sovereign immunity, which can only be done by Congress, is another means by which Congress recognizes government responsibility for its actions. There have been many such waivers. See Note, Rethinking Sovereign Immunity after Bivens, 57 N.Y.U.L. Rev. 597, 602 n.24 (1982). Furthermore, as discussed in text, Congress still passes special bills for those situations not covered by the Federal Tort Claims Act, but where the government should assume responsibility for injuries caused by its actions.

3. Potential Government Savings From Participation

(a) Litigation cost savings. It is in the government's long-term interest to be a participant in a no-fault, administrative compensation program for asbestos to replace the inefficient tort system. A no-fault system will actually save the government substantial costs which have and will continue to arise out of current litigation. The Urban Institute, one year ago, conservatively estimated that the existing asbestos litigation imposes on the federal judiciary over $40 million annually in costs.[47] The government's own litigation expenses, which are now several million dollars annually,[48] are an additional burden, which can only increase as the question of federal responsibility is raised repeatedly in the litigation.

Further, the government already pays asbestos victims for their injuries indirectly through Social Security, Medicaid, food stamps and other income assistance programs.

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[47] Storey & Hatch, Compensation for Victims of Asbestos-Related Diseases: Potential Cost Savings for the Federal Government, Urban Institute Research Paper 3269-01 (March 1983).

[48] There are now over 40 lawyers and other professionals in the Justice Department and other agencies committed full-time to asbestos litigation.

According to the Urban Institute, depending on how Congress structures the no-fault compensation system, such a system could save the government from $19- to $82-million annually in indirect payments to asbestos victims and their survivors.[49]

The substantial savings in federal court costs, litigation expenses and indirect payments that would result from establishment of a no-fault compensation system could offset a major portion of the government's share of responsibility for funding the system.

(b) Avoiding risk of loss. Even more significantly, retaining the present tort system as the means to resolve the asbestos tragedy leaves the government subject to the risk that it will be held liable for tort damages.

Several manufacturers, including Raymark, have already filed a number of lawsuits seeking indemnity and contribution from the federal government for amounts already paid. As I am sure you are aware, Mr. Chairman, the prospects for success in these lawsuits have been greatly enhanced by recent legal developments, including the Supreme Court's decision in Lockheed Aircraft Co. v. United States.[50] Any examination of developing trends will bear out the observation that it is now only a matter of time before the government is found liable for a substantial part of the asbestos disease compensation.[51]

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[49] Storey & Hatch, supra note 47, at 4.

[50] Lockheed Aircraft Corp. v. United States, 103 S.Ct. 1033 (1983).

In fact, the Lockheed decision, which allows third parties to seek contribution or indemnity from the government, even though a direct action against the government is barred, has been applied to asbestos in the Maine Shipyard cases.[52] The court, in that litigation involving private shipyards, denied a government motion to dismiss the manufacturers' claims under the Federal Tort Claims Act.

The developing legal trend lowering the barriers to recovery against the government can be seen in other areas as well. In the Agent Orange litigation, for example, the trial judge recently decided that the United States could be held liable for the independent claims of spouses and children of injured veterans and he declared further that the doctrine barring suits by military contractors for contribution or indemnity against the government rests on "very shaky foundations."[53]

Government participation in a no-fault compensation program for asbestos would eliminate the increasing risk that the government will be held liable for substantial tort damage awards. Thus, the long-term financial interests of the United States would be well-served by federal involvement in a no-fault system.

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[51] See Granelli, U.S. Liability for Asbestos Grows, 5 Nat'l L.J. 1 (April 11, 1983).

[52] In re All Maine Asbestos Litigation, March 2, 1984 issue Asbestos Lit. Rptr. (Andrews Publications) at 7946 (D. Me. Feb. 23, 1984). See also In re All Maine Asbestos Litigation, April 6, 1984 issue Asbestos Lit. Rptr. (Andrews Publications) at 8120 (D. Me. March 12, 1984).

[53] In re Agent Orange Product Liability Litigation, MDL 381, PTO 91 at 13 (E.D.N.Y. Feb. 10, 1984).

C. Preventing Run-away Costs to the Federal Treasury.

Mr. Chairman, while the federal government should indeed contribute its fair share to asbestos compensation, it is absolutely essential that any no-fault compensation program for asbestos must prevent an undue drain on the Federal Treasury. We must avoid some of the mistakes of the past -- which may have produced run-away costs in some federal compensation programs -- and we must avoid creating any precedent that could lead to inappropriate federal costs in the future.

First, I must emphasize that the kind of program I am discussing would establish no harmful precedent that the United States should contribute to victim-compensation programs generally -- because the situation involving asbestos is different from that involving hazardous substances generally. The pervasive federal involvement in wartime asbestos use is totally different from the general regulatory role the government ordinarily exercises with regard to hazardous substances. We are not asking the United States to bear liability because of any failure to regulate adequately, or on account of any other general governmental function; rather, we believe the government should be made accountable for its own commercial and industrial activities involving asbestos -- importation, production, distribution, and use -- just as a private company may be held liable for the same kinds of activities.

We also believe it is essential to structure any asbestos compensation program to prevent excessive federal costs. Please consider the following examples of how this could be accomplished:

- The amount of the federal contribution to asbestos compensation should be calculated to reflect the actual extent of federal involvement in the asbestos tragedy.[54]

- Contributions by private companies and by the federal government should rise if the number of claims rises, so that current expenses of the program can be met without the need for long-term loans from the Treasury.[55]

- If budgetary estimates for the program are exceeded, the entire program should automatically sunset, unless Congress acts to bring the program's budget back into balance.[56]

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[54] Since the United States bears particular responsibility for the operation of the shipbuilding program, and particularly for the asbestos exposure that resulted from shipbuilding, we believe that a 50% government contribution is an appropriate initial proposal -- corresponding to the approximately 50% of our litigation that arises from Wartime shipyard exposure.

[55] By way of contrast, the trust fund created under the Black Lung Benefits Act is financed by a fixed excise tax on coal, and, to the extent the tax is insufficient, the government must lend the entire amount needed to keep the program solvent, for as long as necessary.

Through provisions such as these, I am convinced, Mr. Chairman, that Congress can find a way to accept the government's appropriate share of responsibility for asbestos compensation, while assuring that federal budgetary constraints are not exceeded.

D. Preservation Of Existing Compensation Programs.

A third point involves the very structure of a compensation program.

One proposal would be that the responsibility for asbestos should be entirely shifted from existing state and federal workers' compensation to a new compensation program. However, we see no need to displace existing compensation mechanisms. What is needed is a new no-fault asbestos remedy that replaces tort, but that supplements, rather than replaces, existing workers' compensation.

We would suggest that the new asbestos program should rely on existing state and federal workers' compensation agencies to make initial medical and other decisions establishing eligibility for benefits. Under such a system, any worker who is certified by his compensation board would automatically be entitled to a "supplemental benefit" from the federal fund. Such a system would avoid the creation of a new Labor-Department bureaucracy pre-judging or second-guessing workers' compensation decisions.[57]

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[56] Again by way of contrast, to the extent the Black Lung program runs over budget, the Treasury continues to hemorrhage until Congress acts somehow to stop it.

Overall, existing compensation systems work rather well, and it seems prudent to build upon an established, working system. However, we recognize that there are some problems; and we would suggest that, without imposing any federal standards on state programs, a compensation proposal should assure that unreasonable procedural or jurisdictional deficiencies in state programs do not interfere with providing a supplemental benefit under a new asbestos compensation program.

If workers' compensation is denied because of some procedural or jurisdictional barrier in the workers' compensation system -- such as a statute of limitations or a rule that certain kinds of exposures or diseases are not compensible -- the new supplemental program could disregard this barrier and require an independent federal decision whether the supplemental benefit should be awarded. An independent federal decision regarding eligibility for the supplemental benefit could also be required if a workers' compensation decision is unduly delayed, or where a compensation claim was settled without a determination of eligibility.

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[57] We emphatically do not envision a federal workers' compensation program, which might best be implemented by the Department of Labor. Rather, under the program we envision, the critical federal responsibilities would be nation-wide handling of claims and payment of benefits, and consideration of issues on the forefront of medical knowledge -- responsibilities for which we believe the Department of Health and Human Services would be best suited.

We recognize that such an approach would have some impact on workers' compensation costs, because more claimants would be encouraged to file for compensation. We also believe that the supplemental benefit provided by a new program should be retained by the claimant, rather than being subject to a workers' compensation "subrogation lien" which would now allow the employer or its insurer to transfer workers' compensation costs to product manufacturers.

As a quid pro quo for these impacts on workers' compensation costs, however, we believe that legislation should end all tort litigation against the employer who used asbestos products, so that no suits would be allowed by either the product manufacturers or the injured employees against the employer.[58] The workers' compensation system was designed to be

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[58] This concept is endorsed in the Report of Crum and Forster's Occupational Disease Task Force, in the following terms:

> "There is, however, some merit to proposals requiring that workers' compensation awards paid or payable be deducted from third-party tort awards, and that the workers' compensation lien be abolished in return for immunity against direct legal indemnity or contribution proceedings in

(Footnote continued)

the principal system for providing no-fault compensation for occupational disease, and we propose that this role be retained and strengthened.[59]

We recommend that eligibility for a supplemental benefit should depend on determinations of eligibility under

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(Footnote 58 continued from previous page)

> products liability cases. The employer is in the best position to provide protection to the worker from exposure in the workplace, because the employer selects the materials and substances that are used in the workplace. Thus, any inequity this provision would create is slight, and the employer would receive the benefit of reinforced immunity from suits by employees."

Report of Crum & Forster's Occupational Disease Task Force, Role of the State Workers' Compensation System in Compensating Occupational Disease Victims 46 (June 1983).

[59] An increased workers' compensation caseload could also have some impact on compensation agency costs, but the federal legislation could include provisions to help alleviate the burden on state agencies. For example --

- The federal government would enter into contracts with state agencies -- if they wish -- under which the state agencies would handle many functions under the new asbestos compensation program. Payments to the state agencies under these contracts would allow the state agencies to develop enhanced capacity to handle asbestos-related claims generally.
- In addition, federal legislation could establish a program of direct grants for state compensation agencies and other organizations, to fund development of pilot programs to improve the handling of asbestos-related occupational disease claims.

All costs of these programs would be paid out of the fund established to pay supplemental compensation, funded by the responsible asbestos parties.

existing compensation programs, because in our view -- which is supported by most people we have spoken to -- a new supplemental benefits program for asbestos would pose a risk to existing compensation systems if it established a new federal bureaucracy that pre-judged or second-guessed decisions made by state and federal compensation programs. However, this is a matter of judgment and there may be other opinions.

Another alternative to be considered, therefore, would be to replace the tort remedy with a claims-handling mechanism operating totally without regard to the workers' compensation system.

Whatever approach is used, however, we believe that any federal legislation should not displace the existing workers' compensation mechanism. If there are problems in existing workers' compensation programs, we would certainly support efforts to solve them at the _state_ level.[60] We therefore propose to replace the _litigation_ with an equitable no-fault administrative payment, but would leave workers' compensation intact.

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[60] _See generally_, _Report of Crum & Forster's Occupational Disease Task Force, Role of the State Workers' Compensation System in Compensating Occupational Disease Victims_ (June 1983).

E. Certainty and Promptness of Insurance Availability.

Finally, the new program should recognize that all of our liability insurance policies paid for over the past decades should be available to us.

There is already enormous dispute and litigation, as I mentioned earlier, between manufacturers and producers, on the one hand, and our insurance carriers on the other.[61] This complex, lengthy, and costly litigation has had an important impact on our companies because, as long as the disputes remain unresolved, we have been unable to collect on some of our policies.

This causes difficulties enough under the present protracted litigation. However, if the new administrative remedy is prompt, as we all intend it should be, any insurance dispute not settled by the legislation could delay a company's ability to collect under its policies -- with potentially devastating consequences. How ironic it would be if the legislation succeeded in streamlining the process for resolving employee claims without litigation, but failed in its ultimate mission because insurance litigation made it impossible to obtain the funds promptly enough to pay the needed benefits!

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[61] In part because asbestos diseases do not become manifest for many years after exposure to the dust, a debate is raging as to when an insurer is responsible for defending the insured company and paying the award. There are two primary areas of disagreement.

- Which policies apply to a particular victim -- the ones covering the period of exposure to asbestos, the ones covering the latency period, the ones covering the time the disease became manifest, or all of the above?
- What is the extent of coverage under each policy, for a kind of injury that was never anticipated when the policy was written decades ago?

Due to these disputes, some insurers will pay nothing under their policies until ordered to do so by a court.

We therefore urge that a reasonable, uniform rule be drafted to govern how existing insurance would be applied to pay for assessments under the new no-fault administrative program. There is no practical or legal reason for hesitation in this regard. The insurers received millions of dollars in premiums as compensation for bearing the tort exposure and litigation expense that the new federal no-fault program would eliminate. Furthermore, under the new administrative program, the insurance companies -- as much as or more than the asbestos market participants -- will enjoy the benefits of reduced litigation expenses and other transaction costs, and the increased predictability of costs. Without a rule such as we suggest, the exposure of the insurance companies would be at least as uncertain and vigorously disputed as it is today. If tort liability were eliminated but rules were not established providing for payment of the assessments out of existing insurance, the insurance companies could reap a windfall of millions of dollars, and the new program might not be affordable by the asbestos product suppliers.[62]

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[62] Such an approach is certainly within Congress's authority under the constitution. In general terms, Congress may make reasonable adjustments to contractual obligations to avoid an untended windfall or burden and to avoid dispute and litigation. See City of El Paso v. Simmons, 379 U.S. 497 (1965). One appropriate technique for making such adjustments is for the legislature to refer to a principle of judicial construction, and derive from it a general rule to apply to existing contracts. See Gelfert v. National City Bank of New York, 313 U.S. 221, 233 (1941).

With regard to insurance contracts in particular, Congress or a legislature may make such reasonable adjustments in the terms of existing insurance arrangements as may be necessary to achieve a compelling general social objective of a legislative program. So, for example, as part of New York's no-fault automobile statute, the legislature required carriers to extend the life of existing policies for a certain period. The court upheld this requirement because it was needed to sustain the overall scheme:

> "The same public interests which justified the imposition of the entire No-Fault scheme support this aspect of the statutory framework. The law accomplishes a legitimate public goal and any contract right must yield to it."

Country-Wide Insurance Co. v. Harnett, 426 F. Supp. 1033, 1035 (S.D.N.Y.) (citation omitted), aff'd mem., 431 U.S. 934 (1977).

Likewise, in Travelers Insurance Co. v. Marshall, 634 F.2d 843 (5th Cir. 1981), the court reviewed provisions of the 1972 amendments to the Longshoremen's and Harbor Workers' Compensation Act. The court construed the statute to add a new term of liability to existing policies, but found this approach constitutional on the grounds that it is a "rational method for achieving Congress's goal of compensating those injured in maritime employment . . . ." Id. at 849.

The contemplated asbestos legislation would involve even a lesser alteration of existing contract terms, because the bill would not add on an additional term of liability as did the Longshoremen's amendment, but would instead substi-

(Footnote continued)

It would also be valuable to establish a special judicial tribunal to provide prompt, uniform decisions for any insurance disputes. Such a special-purpose tribunal was established to resolve disputes arising out of the Penn Central reorganization,[63] and the need for such a tribunal may be no less acute here. Indeed, in establishing a new program, it is common practice for Congress to designate a single court to hear disputes under the program.

We are eager to work with this Subcommittee -- and with the insurance industry -- to arrive at a precise and fair definition of the insurance obligation under a new compensation program, and to develop appropriate rules and processes to assure that disputes over insurance coverage do not impede the funding of the program.

(Footnote 62 continued from previous page)
tute liability under the new remedy in place of whatever tort liability under the policy would be eliminated. Any extension of coverage under the new legislative framework would also tend to be offset by limits on benefits, reduced litigation expenses, and increased certainty in amount of liability, which the new no-fault program would provide. And the purpose of the legislation would certainly be appropriate and compelling -- to prevent a windfall for the insurance companies, and to eliminate disputes that may threaten the prompt implementation of an essential compensation program.

[63] See 45 U.S.C. § 719(b) (1976) (establishing special court for Regional Rail Reorganization Act cases).

CONCLUSION

Mr. Chairman, the task at hand is to assure worthy claimants of prompt, certain, just compensation, and to eliminate the enormous costs and inequities of the existing system.

Although much work remains to be done, one thing is certain -- the existing situation cannot continue much longer. To those who testify before this Subcommittee and offer only criticism, I suggest, Mr. Chairman, that you ask them: "What's your solution?"

We take heart that you are holding these hearings and are interested in seeking a solution. We pledge our assistance to your continuing efforts to solve this crisis, which overwhelms our courts, plagues American business, and imposes unfair burdens on injured working people throughout the nation.

I would be pleased to answer any questions.

June 18, 1984

ANSWERS BY FREDERICK J. ROSS TO QUESTIONS POSED BY SENATOR DON NICKLES

1. Q It was suggested by the American Lung Association at the Subcommittee hearing that a National Medical Panel should review each case to determine the relationship, if any, between asbestos exposure and the presence of any disability or death. What are your thoughts on such a panel?

A A National Medical Panel could be a very important element of asbestos compensation legislation. Such a Panel would help assure that difficult medical questions are answered on the basis of sound medical science, rather than legal or political expedience.

The most important objective of a National Medical Panel should be to reach a consensus as to what diseases can be caused by exposure to asbestos, and to develop criteria for diagnosing those diseases and for assessing whether a disease in the case of a particular individual was caused by asbestos. If the criteria produced by a National Medical Panel are well designed, doctors in various parts of the country can use the criteria to reach sound medical judgments regarding the relationship between asbestos exposure and disability or death in most individual cases. In this way, cases can be decided on a sound medical basis, without the extra bureaucratic step of having the National Medical Panel review each claim individually.

ANSWERS BY F.J. ROSS

TO QUESTIONS BY SENATOR NICKLES

2. Q We were also told that legal fees for defense got about 37% of every dollar going to asbestos compensation while legal fees for the plaintiff were around 22 to 26% of every dollar. Why do the defense percentages appear so much higher than the plaintiff's?

A Although I cannot say whether the percentages cited are accurate or not, I can suggest factors that impose particularly heavy costs on defendants in the asbestos litigation.

We face a problem shared in some other kinds of litigation: that it is often less expensive to bring an action than to defend against it. One reason is that, in the typical asbestos claim, there is a single plaintiff and over a dozen defendants; and each of the defendants must be represented by its own different lawyers. No one company can depend on another to look after its interests, because if the plaintiff wins an award, the cost may be divided up among the defendants on the basis of facts in the case involving each company's products and activities. Under the principle of joint and several liability, any defendant that did not adequately protect itself might be required to pay 100% of any judgment.

Indeed, regarding some issues in the case, defendants must be adversaries as much to each other as they are to the plaintiffs. The only way the multiple defendants in each case can protect their interest is by hiring multiple lawyers, so the aggregate cost for all defendants becomes enormous.

ANSWERS BY F.J. ROSS

TO QUESTIONS BY SENATOR NICKLES

2. A (continued)

Furthermore, one of the most expensive aspects of litigation is discovery of information. Most of the discovery in the asbestos litigation involves requests for information by the plaintiffs, and it is ordinarily far less expensive for them to request an extensive document search or other discovery than for the defendants to respond to such a request. For these reasons and others, defense costs can mount very rapidly indeed.

3. Q A number of newspapers have reported a "major breakthrough" in ongoing negotiations between asbestos manufacturers and their insurers. One witness suggested that with that agreement in place, no further remedial action is needed. If those discussions are concluded successfully, do you still advocate a legislated compensation system? Why?

A As John Baldwin and I noted in our testimony before this Subcommittee, establishing an "Asbestos Claims Facility" could reduce some of the enormous cost and delay of the present litigation. It should be noted that there is no assurance that such a facility will ultimately work. Yet, if the private facility is fully successful, I believe that federal legislation will still be needed to solve certain important aspects of the asbestos compensation problem.

ANSWERS BY F.J. ROSS

TO QUESTIONS BY SENATOR NICKLES

3. A (continued)

The Asbestos Claims Facility will provide a single place for plaintiffs to file a claim, thereby making it easier to reach a settlement and save the enormous legal costs required by litigation. The Facility is to be funded by asbestos manufacturers and their insurance companies, under an agreement that would resolve the insurance coverage litigation as well as the disputes among asbestos producers.

Although I am very hopeful that such a private arrangement can result in prompt and fair settlement of many claims, I believe that legislation will still be needed. For example, although the Federal Government bears a major share of the responsiblity for the creation of the asbestos tragedy, the private Asbestos Claims Facility now anticipates no voluntary financial participation from the Government. The Government would remain subject to litigation and possibly enormous liability. Legislation may therefore be necessary to end the litigation involving the United States and to assure that the U.S. bears its fair share of compensation costs. Likewise, legislation may be desirable to clarify the ability of Manville Corporation and the other companies in Chapter 11 reorganization to participate in the Facility. Other issues also may need to be addressed by legislation, if there is to be a satisfactory solution.

ANSWERS BY F.J. ROSS

TO QUESTIONS BY SENATOR NICKLES

3. A (continued)

It will be several more months before we know how many asbestos producers and insurance companies will join the proposed Facility. Unless enough companies subscribe, the Facility cannot begin operation at all. Full success will also depend on whether plaintiffs actually use the Facility to settle their claims.

As the efforts continue during the next few months to get the Asbestos Claims Facility established and into operation, we will be able to see more clearly what aspects of the asbestos compensation problem can be solved by this private initiative, and what aspects of the problem will still need legislation.

4. Q Some witnesses at our hearing implied that defense costs in asbestos cases are the source of most inefficiency in the litigation, and I certainly agree they appear to be high. Would you tell us what your experience in defense costs has been, and as a general matter why you defend these cases vigorously?

A I would agree that our defense costs are very high, but, if we did not pay these costs and defend ourselves vigorously, we simply could not survive at all. Raymark has never hesitated to settle where there is a reasonable demand by an eligible plaintiff. However, I have an

ANSWERS BY F.J. ROSS

TO QUESTIONS BY SENATOR NICKLES

4. A (continued)

obligation to my shareholders to resist claims by individuals who are not sick, or whose illnesses could not have been caused by our products, or who demand totally unrealistic amounts of money.

As I noted in my written statement submitted to this Subcommittee, new plaintiffs seek damages from Raymark totaling about $870-million each month. In January of this year, claims seeking $1.06-billion were filed. In the face of such claims we have little choice: we must either defend ourselves vigorously or else quickly exhaust our financial resources, literally in a few days.

In 1983, Raymark and its insurers had to spend nearly $10-million to fund its legal defense. Raymark won 25 of the 41 cases tried to verdict in a recent 18-month period; and yet, to prove our innocence in these 25 trials, it cost my company well over $1 million in legal fees. In the one Connecticut case that has gone all of the way to trial and verdict, Raymark was vindicated -- but only after a delay of nearly 5 years and a cost to our company of over $66 thousand in legal fees and other expenses. And there were 10 other defendant companies in the same case, each incurring its own attorneys' fees and costs.

ANSWERS BY F.J. ROSS

TO QUESTIONS BY SENATOR NICKLES

5. Q What steps do you recommend to prevent your proposal from becoming a runaway entitlement program like black lung?

A I could not agree more, that any compensation program must be designed to assure that it does not become a runaway entitlement program. Let me suggest several ways that this would be accomplished under our proposal:

- It is important to avoid unsound presumptions and filing requirements, which can result in the payment of compensation without sound medical findings of disease and disability. We would recommend establishment of a National Medical Panel, as was discussed earlier in this paper, to assure that medical issues are decided on a sound medical basis.

- The amount of the federal contribution to asbestos compensation should be limited to the extent of actual federal involvement in the asbestos tragedy.

- Rather than having companies fund compensation through a fixed tax or fee, we recommend that the amount of companies' payments should rise if the number of claims rises. In this way, if costs of the program go up, the companies' payments will go up too, rather than having the companies' share be picked up by long-term loans from the United States.

- If budgetary estimates for the program are exceeded, the entire program should automatically sunset, unless Congress acts to bring the program's budget back into balance.

STATEMENT OF JOHN L. BALDWIN
SENATE LABOR SUBCOMMITTEE
APRIL 30, 1984

Mr. Chairman and Members of the Subcommittee:

I am John L. Baldwin, President and Chief Executive Officer of Pittsburgh-Corning Corporation. I serve also as President of the Committee for Equitable Compensation.

With me today is Frederick J. Ross, President and Chief Executive Officer of the Raymark Corporation, who will present the views of our Committee.

Before I turn the microphone over to Fred Ross, I would like to make a few remarks about our organization, and to express our great appreciation to this Subcommittee and its staff for providing us an opportunity to testify regarding a very serious national problem -- the flood of occupational asbestos-disease claims clogging our courts and clouding our companies' future.

The Committee for Equitable Compensation was founded in the fall of 1982 for the purpose of furthering and supporting congressional and other efforts to develop an equitable system of compensating victims of diseases associated with exposure to asbestos. Our thirteen members are companies concerned with the asbestos compensation issue, principally current or former manufacturers of products that contain asbestos. Our membership does not include any of the companies undergoing Chapter 11 reorganization.

The members of our organization are exploring all reasonable avenues that might help resolve the dreadful national crisis surrounding asbestos compensation. We are doing what we can to resolve at least some of the difficulties through non-legislative means -- including establishment of a facility to provide privately negotiated, non-judicial settlements; and possibilities of using the ongoing bankruptcy proceedings involving the Manville Corporation as a forum in which at least some of the problems can be aired.

For example, you may have read in the newspapers recently about the efforts of some of the asbestos manufacturers and some of the insurers to establish an improved process for reviewing and settling asbestos health claims. If successful, such approaches could reduce some of the enormous cost and delay of the present litigation. It may well be, however, that federal legislation provides an answer to all aspects of the asbestos compensation problem.

The primary effort of our organization is to support and assist with congressional initiatives to establish a national program for prompt and equitable compensation for those suffering from asbestos-related diseases. It is for this reason that we are particularly pleased to appear before you today.

Senator Nickles, you and your staff are to be congratulated for holding these hearings to explore this very serious problem facing our nation. I am heartened by your interest, and hope that you will take a leading role in seeking a sound solution to the national tragedy facing us all.

Mr. Chairman -- with the permission of the Subcommittee, Fred Ross will now explain our views on the need for federal legislation and will answer any questions you may have.

(Note: Due to printing limitations and in the interest of economy, additional appendix material submitted at the hearing was retained in the files of the committee.)

Senator NICKLES. On our next panel is Robert Flockhart, senior counsel for the American Insurance Association; Mr. Thomas O'Day, assistant vice president for the Alliance of American Insurers; and Mr. J. Howard Bunn, Jr., vice president for the National Association of Independent Insurers.

Gentlemen, welcome to the committee.

Mr. Flockhart, do you care to be first?

STATEMENTS OF ROBERT W. FLOCKHART, ESQ., SENIOR COUNSEL, AMERICAN INSURANCE ASSOCIATION, WASHINGTON, DC, ACCOMPANIED BY DENNIS R. CONNOLLY, ESQ., SENIOR COUNSEL, AMERICAN INSURANCE ASSOCIATION, NEW YORK, NY; THOMAS O'DAY, ASSISTANT VICE PRESIDENT, ALLIANCE OF AMERICAN INSURERS, WASHINGTON, DC; AND J. HOWARD BUNN, JR., VICE PRESIDENT, NATIONAL ASSOCIATION OF INDEPENDENT INSURERS, DES PLAINES, IL

Mr. FLOCKHART. Yes, Senator Nickles, thank you.

At this time I would like to introduce my colleague, Senior Counsel Dennis Connolly, he is our leading expert on liability insurance matters, and I would appreciate if he would be allowed to respond to any questions that might come up in that regard.

Senator NICKLES. Certainly.

Mr. FLOCKHART. I am Bob Flockhart, senior counsel with the American Insurance Association. Our association is comprised of 170 property and casualty insurers, and we write approximately 50 percent of all the workers' compensation and occupational disease insurance written countrywide. Accordingly, we appreciate this opportunity to present our views at this hearing.

We are firmly committed, as an association, to the maintenance of the State workers' compensation system. We oppose any Federal legislation which would infringe upon, or otherwise usurp, that State activity.

In most States the workers' compensation system is working effectively and accurately, in responding to occupational diseases.

We want to say right away that that does not mean that the State systems are perfect. There are certain States, which are in the minority, that have, for instance, statutes of limitations, which run from the date of last exposure, with a result that individuals are cut out of the system before they even know they have a disability.

There are also States where the benefits are geared to the wages of the date of last exposure, and therefore, are seriously deficient. Nevertheless, the States have, particularly since the National Commission's Report in 1972, actively reviewed their workers' compensation laws, and eliminated inequities and inadequacies in those laws. We believe that they should be allowed to do so, that they will do so, and we are actively supporting and seeking such reform.

We do not believe a Federal program, such as the Federal Black Lung Program, which you have referred to earlier, Senator, is a desirable or necessary recourse.

Thank you, sir.

[The prepared statement of Mr. Flockhart follows:]

STATEMENT OF
AMERICAN INSURANCE ASSOCIATION
BEFORE THE
SUBCOMMITTEE ON LABOR OF THE
SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES
APRIL 30, 1984

My name is Robert W. Flockhart. I am Senior Counsel with the American Insurance Association, an organization comprised of 170 property and casualty insurance companies. Our member companies write nearly fifty percent of the total workers' compensation and occupational disease insurance written countrywide. Accordingly, we greatly appreciate this opportunity to present our views at these oversight hearings on occupational disease.

Our Association is firmly committed to the maintenance of the state workers' compensation system, including coverage for disabilities resulting from occupational disease. The state systems, while not uniformly perfect, are an existing mechanism that has served the needs and best interests of employees, employers and the general public for more than fifty years.

We are not suggesting that all 50 states have laws which promptly respond to occupational diseases. There are some states with restrictive statute of limitations, which can terminate an employee's right of action before the employee has knowledge of the disability or its work related cause. The number of states falling into this category is limited. There are some states where benefit levels have not risen to the levels we and the majority of people would consider equitable and adequate. On the other hand, a majority of states have benefit levels equal to and in some instances greater than 100 percent of the states' average weekly wage.

All states have comprehensive occupational disease coverage for diseases arising out of and in the course of employment. The phrase "arising out of and in the course of employment" has been well established in every state by years of court interpretation. Disputes arise when the individual is showing symptoms which are not clearly established by medical evidence as a disease which is caused by an exposure in the work place. While we strongly support a non-litigious system, we are opposed to the establishment of "legal diseases", i.e., diseases established by legislative definition or presumptions rather than medical evidence. Compensable diseases should truly be occupational diseases, i.e., diseases arising out of and in the course of employment.

Our Association has long supported legislative changes at the state level to provide an adequate and equitable workers' compensation and occupational disease system. We are committed to seek legislative change in those states where there are artificial barriers to filing justified claims. We do not believe there is a need for any federal intervention or take-over of the states' workers' compensation systems. Certainly the financially-troubled social security program and the federal black lung program do not establish precedents likely to arouse the support of people who believe adequate and equitable compensation systems should also bear in mind the rights and interests of those who must pay the bill. Therefore, we urge your opposition to the creation of any new federal entitlement programs which will infringe on, or replace the long established state workers' compensation system.

I thank you for the opportunity to present the views of the American Insurance Association.

Respectfully submitted,

Robert W. Flockhart

Robert W. Flockhart
Senior Counsel
American Insurance Association

RWF:pf

Senator NICKLES. Thank you very much.

Mr. O'Day.

Mr. O'DAY. Good morning, Senator.

I will just quickly summarize some of the points that are in our longer statement that you have in front of you.

My name is Tom O'Day, and I am the assistant vice president of the Alliance of American Insurers, and we do play a major role in providing workers' compensation to American companies across the United States.

We appreciate this opportunity to testify and present our views on occupational disease. Without question, the subject has been the subject of much examination and explanation, discussion and criticism and debate, in almost every type of forum, for the past several years.

We commend the committee for these oversight hearings. We particularly commend you because we believe that these hearings will materially assist in disspelling some of the misperceptions, the half truths surrounding occupational disease, and its handling by the State workers' compensation system.

I would particularly like to touch upon some of the previous estimates that have been used by both Government and others, which have created an unfair benchmark from which to gauge the ability of State workers' compensation to handle occupational disease.

In our statement we mention several of those. I will not take the time right now to spell them out, but basically we believe, as do many others, that these estimates are wrong by a factor of at least 10, maybe more. So that they are exaggerating the problem of occupational disease by at least 10 times.

So if you are saying there are 100,000 people killed, that is not 100,000, it is 10,000. That is still a big problem, but you need a fair benchmark if you are going to judge the ability of the system to handle the occupational disease that is coming forward today.

As Mr. Flockhart mentions, the system is not perfect. The States are working on making the corrections that are necessary. It is important that it is the States that do this, because it is those people who are going to have to bear the burden of administering the system, and the cost of handling these cases as they come forward. If the Federal Government, or any other body, but particularly the Federal Government, interferes with that process, what you will have again, as Mr. Flockhart mentioned, is an intrusion which does not help the problem, but worsens the problem.

The best example of such intrusion that we have had in our history, and one that is constantly referred to, is the black lung experience, and you are well aware of that.

Another point that I would like to touch upon, that we make in our statement, is what is happening in the asbestos product liability area. There is a problem there. Obviously you have tens of thousands of cases out there.

The fact that there is a product liability problem related to asbestos does not in any way indicate that there is a failure of State workers' compensation.

As the previous witness testified in his case, some 70 percent of these came from their involvement with the Federal Government through, and I think he said, but I am not absolutely sure of that, came through their involvement in the shipyards. The shipyards at that time were, and still are, covered by Federal compensation acts. Those acts in no way bar the bringing of workers' compensation claims. Those acts are considered today some of the most generous acts in terms of providing workers' compensation to injured employees.

Yet, the fact of the matter is that most of the people who have a case there have chosen not to follow workers' compensation. Why have they done this?

Well, there is a variety of explanations. Probably the best one is that they are seeking the promise or the expectation of higher awards. The million dollar jackpot under product liability. They have been advised, some of them, not to seek workers' compensation, to maybe follow social security disability.

The difference between the two is that there is no offset if you are paid compensation under social security disability. If you are paid it under State workers' compensation, or under Federal workers' compensation, there is an offset of whatever you have been paid under workers' compensation in terms of your product liability award.

There is also the fact that if you follow workers' compensation, you are going to be subject to examination. You are going to have to prove a causal link between your workplace exposure and the disease that has come forward to hit you. It is a fair test. One that is necessary, or otherwise you are saddling industry with all the ills of society. This is what we saw happening in the black lung program.

The black lung program, when it was originally set up, would have only paid people who were disabled from the workplace. It started to do that. But the expectation was that it should have paid more people, and so the act was changed quickly. I think you just mentioned that the earlier prediction was that it should just be a few million dollars, and that is maybe what it would have been, if it had stayed that way. However, it was not paying the people that it expected to pay. Again, coming back to the benchmark that we are looking at, if you expect that there are tens, hundreds of thousands of people being injured by occupational disease, and you set up the system to compensate them, State or Federal, and if the benchmark is incorrect, then you are going to have to try to change that system quickly, in order to meet the expectation of people who should be compensated.

Finally, I would say that we agree with Mr. Flockhart, and agree, I think, with the previous witnesses, that the State system is where we should be, and if there are things that need to be changed in the State system, they should be changed.

The business community, organized labor, the insurance industry need to work together. I named three key players there. If one of them is missing from working on correcting the problems, then it is very difficult for the remaining two, or whatever, to correct the problems.

We found that there is a certain reluctance on at least one part of that group to address problems at the State level, and I am speaking specifically of organized labor. They seem to have a willingness, desire, to seek a Federal correction to whatever problems exist.

Many of us do not appreciate that. We welcome them to sit and work. They have been invited. They do attend sometimes, but it is a mixed bag. Importantly though, if the system is to continue as it has in the past, to be improved, all the players must be there, and they must continue to work together.

Thank you.

Senator NICKLES. Thank you very much, Mr. O'Day.

[The prepared statement of Mr. O'Day follows:]

Prepared Statement of Tom O'Day

My name is Tom O'Day and I am Assistant Vice President of the Alliance of American Insurers. We are a major association of property and casualty insurance companies. Our member companies write workers compensation insurance in all 50 states and the District of Columbia. Some of our members are among the largest workers compensation insurers in this country. Many were organized specifically to provide this type of insurance coverage. A number of companies have gained an international reputation for their pioneering work performed in the related fields of occupational health and safety, occupational medicine and rehabilitation.

Alliance companies underwrite about 22% of the workers compensation business in this country, and this line of insurance represents a major portion of the entire insurance business written by our companies. This explains why the Alliance has traditionally been so deeply involved in any discussions of workers compensation reform.

We appreciate this opportunity to testify and present our views on occupational disease issues. Without question, occupational disease, particularly asbestosis, has been the subject of examination, explanation, discussion, criticism and debate in every type of forum over the past several years. We commend the Committee for these oversight hearings. We believe that they will materially assist in disspelling some of the misperceptions surrounding "occupational disease" and its handling by the state workers compensation system.

The Workers Compensation Occupational Disease Problem in Perspective

The state workers compensation system is being subjected to an increasing number of attacks on its ability to effectively compensate diseases arising out of and in the course of employment. Some critics of the system perceive occupational disease to be a serious threat to the continued viability of state workers compensation and even to its survival. We submit that the evidence cited in support of this contention is, at its best, open to serious question.

The handling of occupational disease claims under state workers compensation laws began to come under heavy criticism upon the publication of a National Institute for Occupational Safety and Health report filed with the Occupational Safety and Health Administration in September, 1978. That report projected that perhaps as much as 38% of all cancer mortalities were directly related to six known carcinogens often found in the workplace. The report was, and continues to be, used extensively to create a sense of a pending national crisis. Former HEW Secretary Joseph Califano repeatedly stressed the report's conclusions on television appearances and in press conferences.

One of the more popular misconceptions which emerged at that time and continues to persist was that perhaps as many as 100,000 deaths per year result from occupationally related diseases. Despite the shallowness of the derivation of that figure, the number acquired great acceptance following its use by Secretary Califano in a much publicized television appearance.

At various public forums and in the media, speakers and writers made broad pronouncements of impending financial disaster. Alarming statistics on the number of workers disabled from asbestos, occupational cancers or some other occupational disease were always included. In most cases, the critics concluded that the state workers compensation system, and in some instances, the tort system, was failing to compensate victims of occupational disease.

However, the occupational mortality estimates which led to the conclusions are open to serious question. Doctors Peter S. Barth and H. Allan Hunt of the Department of Economics, University of Connecticut, were given the following explanations by NIOSH on how the estimate was reached.

> "The approach taken to arrive at this estimate consisted of examining overall mortality rates for persons employed in a wide variety of occupations, and relating them to the mortality rate of the general population, taking into consideration age and relative social-economic level. The data source utilized in the process was the 1951 Registrar-General's Occupational Mortality Report for England and Wales, which is the only source currently available with sufficient detailed information. From this compendium, occupational groups whose mortality rates were greater than the general population rate (after adjustment for age and social class) were counted as having an excess death rate attributable to the environment in which they work. The number of deaths over and above those which would have been expected on the basis of age and social class were summed over all occupations and treated as occupational disease deaths. This figure was then divided by the total number of occupational disease deaths that might be expected annually in this country, this rate was applied to a recent estimate of the number of employed persons in the United States. The result of this procedure yielded an estimate of 75,000. If one ignores social class in the calculations, the estimate would be 100,000."

Doctors Barth and Hunt were quick to point out the limited relevance to the U. S. of the British experience; to the "potentially serious estimating difficulties" arising from differences between the two countries; and to the "myriad issues that one should raise with respect to a 1951 report on occupational mortality rates." Yet, the discredited mortality rate projection persists.

Another explanation of the "100,000 death case" figure was provided by William J. McCarville, Director, Environmental Affairs, Monsanto, to the House Committee on Education and Labor. In this instance, he indicated that NIOSH sought a different rationale to support its quantification. There, NIOSH relied on the ratio of violent to non-violent deaths in underground metal and uranium mines and in smelting plants. Oddly enough, NIOSH assumes that "all non-violent deaths of everyone who works in industry are caused by work-related factors."

Another source being used in the public press as a basis for quantification of the occupational disease problem is the Department of Labor's Interim Report to the Congress on Occupational Disease. The first chapter of the report discusses the magnitude and severity of occupationally related diseases. This chapter begins by giving all the necessary qualifiers needed when making estimates of occupational diseases. It then surveys a number of studies on substances about which some occupational connection appears to be supportable. The qualifiers discussed previously are ignored, however. Finally, it proceeds to use social security data based on individual self perceptions as to the occupational connection with his/her condition. A masterful impact is achieved. The Department of Labor cannot be charged with ignoring the necessary qualifiers. The careful resort to epidemiological data (which may or may not be correctly used) leaves an impression of fairness because the report alleges a larger degree of exposure than that used for the exposed population in developing estimates of death. After leaving the impressions that it has taken into consideration the qualifiers and that it has faithfully looked at the scientific data and found that these data under-report the number of occupational disease cases, the report then turns to a 1972 Social Security Survey of Disabled and Nondisabled Adults ages 20 to 64 which was updated in 1974. It uses Social Security data based on an individual's own perception as to the occupational connection with his or her condition. The groundwork laid leaves the impression that this study has scientific validity, when in fact, the study is based on subjective opinion from a survey which never was intended to gather information on occupational disease. To provide the data which the report uses, the study itself appears to have been subject to manipulation.

In their report for the Office of Technology Assessment, "The Causes of Cancer", Doctors Richard Doll and Richard Peto of Oxford University, are highly critical of the methods used by OSHA in reaching the estimates projected in its 1978 paper--particularly the disregard of both the amount of dose and the duration of exposure--which they believe results in increasing risk estimates by more than 10 times. Furthermore, they criticize the study for failing to consider personal characteristics that affect the risk of cancer, such as smoking and socio-economic status. In fact, Doll and Peto go so far as to characterize the OSHA report as having been written "for political rather than scientific purposes, and it will undoubtedly continue in the future as in the past to be used for political purposes by those who wish to emphasize the importance of occupational factors, including the Toxic Substances Strategy Committee in their 1980 report to the U. S. President as well as many newspaper articles and much scientific journalism." Doll and Peto suggest that the OSHA report should not be "regarded as a serious contribution to scientific thought" and that its findings should be "dismissed."

A similar problem exists relative to the incidence of disease arising out of exposures to asbestos. According to Dr. Irving J. Selikoff, as many as 200,000 surviving workers who have been exposed to asbestos in the past 40 years, will die of asbestos-associated cancer by the end of the century. The report goes on to say that approximately 8,500 asbestos related cancer deaths today are appearing annually among workers who were exposed to asbestos since 1940, and that this will rise to about 10,000 by the year 1990.

Dr. Selikoff's analysis is also sharply challenged in the Doll and Peto report. These researchers, working on a contract for an arm of Congress itself, dissect the arguments used by Dr. Selikoff to reach his alarming projections and conclude that Dr. Selikoff is wrong by at least a factor of 10.

Drs. Doll and Peto are not alone in criticizing the Selikoff estimates. At a conference held in 1981 at the Cold Spring Harbor Laboratory, panelists using a variety of epidemiological approaches estimated that the proportion of U. S. cancer deaths currently due to asbestos is around 1 to 2% rather than the 13 to 18% projected by Dr. Selikoff. Incidentally, there was no dissent from this consensus even though a number of Dr. Selikoff's co-workers were present at the conference.

It is extremely important to place the occupational disease projections by NIOSH and other critics in proper perspective since they remain as an unfair benchmark against which the ability of state workers compensation laws to cope with occupational diseases is often measured.

Obviously, if these projections are off by a factor of 10, the number of compensable occupational disease claims flowing through our workers compensation system would be nowhere near the quantity estimated by system critics. We strongly believe public policy must be based on the best available research estimate of the scope of the problem.

Tort Problem Does Not Indicate Workers Compensation Failure

It has been alleged by some critics of workers compensation that the relatively small number of asbestos claims picked up by the system is, of itself, an indicator of the system's failure. In our opinion, this is a conclusion reached without adequate cause and effect justification.

The fact is that the major asbestos exposures occurred on ship construction in occupations covered primarily by federal laws: the Federal Employee Compensation Act and the Longshoremen's and Harbor Workers' Compensation Act. There are few, if any, barriers to asbestos claims under either of these two federal Acts. Their benefit systems are more than adequate. Yet, there are few asbestos claims filed under these programs.

A similar situation exists in California, where the state established a special asbestos workers compensation fund to cut through alleged red tape and provide benefits to asbestos-related victims on a "no fuss" basis. Payment of these benefits would not, in any way, preclude victims from pursuing either their workers compensation remedies or their tort liability remedies, or in fact both. What has been the result? The flood of claims anticipated has not materialized. Let me emphasize that California is one of the states that has experienced one of the widest occupational exposures to asbestos.

Why no claims? In our testimony before the House Labor Standards Subcommittee, of this Congress, we described in some detail the reasons we believe asbestos victims are more likely to pursue product liability remedies than their workers compensation benefits--even though under all workers compensation laws, they would be entitled to seek both product liability and workers compensation benefits, with workers compensation benefits being offset against the product recovery.

To understand the present asbestos crisis and the relationship between the liability system and our workers compensation system, one needs to recognize that historically the responsibility for any work injury or disease caused by the negligence of anyone other than the employer or the employee has been the ultimate responsibility of the tort liability system. This long standing public policy has consistently received support at both state and federal levels. Now, there are some critics that would charge that the state workers compensation system is not accommodating occupational disease claims, because of problems in the tort system.

However, we believe the state workers compensation systems do have the capability to cope with asbestos related problems as well as other occupational diseases. Studies indicate that when workers compensation claims related to asbestos are filed, claimants do receive benefits. An analysis of the data presented in Dr. Selikoff's report to the Labor Department, for example, indicates that 89% of the claimants who had disability claims were compensated. As for death claims, Dr. Selikoff admits to a very high percentage of benefits being awarded, measured against claims filed. While his report summary only makes a general statement that almost all of those who filed for death benefits received such benefits, one must dig into the report to find a ratio of cases in which benefits were paid. Excluding pending but unresolved claims, 93% of those that filed for death benefits received such benefits. Including the pending claims, 85% of death claims filed received workers compensation benefits.

We believe, however, that there may be a number of reasons a claimant or an attorney pursuing a third party liability action for asbestosis chooses not to file for workers compensation benefits at the same time. For instance:

- There are some who believe that pursuing a workers compensation claim exposes the claimant to a variety of medical examinations which the attorney for the product liability claimant would just as soon avoid.
- The presence of a workers compensation lien can be an obstacle to settlement of a third party liability claim. The lien would certainly affect the fee which the attorney for the claimant in the liability case would receive.
- One obvious reason is the disparity in the application of the social security disability benefit law offset against workers compensation benefits and other benefit systems. The offset penalizes the claimant who files for workers compensation benefits since filing for such benefits may lead to reduction in social security benefits. No such reduction applies when a claimant recovers in a products liability tort suit.

It is difficult to estimate the comparative number of claimants filing for recovery under the workers compensation as against the tort liability system. Nevertheless, we believe that there are at least ten asbestos related product liability claims filed for every one workers compensation claim. When one assesses the extent to which asbestos related diseases are compensated, these product liability claims must be taken into consideration.

We cannot overemphasize the fact that the relatively small number of asbestos claims in the workers compensation system is no indication whatsoever of the ability of the compensation system to cope with occupational disease. Let us face reality! Victims of asbestos-related exposures have turned directly to the liability system as a preferred compensation mechanism for one or all of a number of reasons. Possibly most important is the expectation of "higher awards" which sometimes come under the tort system.

State Laws and Occupational Disease

The capacity of the states to accommodate occupational disease has significantly increased since the days when occupational diseases were defined and included with scheduled injuries. Diseases not listed were barred from coverage. While some of this still persists in the form of specific disease provisions in some of the state laws, today, all states provide full coverage for occupational disease.

However, there are frequent allegations that some statutes effectively bar payment for occupational disease. We believe that those making such statements are misinformed. Appendix I provides a state-by-state analysis of occupational statutes of limitations, ruling court decisions affecting occupational disease statutes of limitations and appropriate excerpts from state laws. While there still remain a few states with rigid limitations, in most states the statute of limitation in disease cases does not begin to run until the discovery of the relationship between a disease and employment.

Of course, for a disease to be compensable under state workers compensation laws, it must be related to employment. If the government wants to require a disease to be covered under workers compensation laws, whether or not that disease is related to employment, it can do so by legislative fiat--through the establishment of unwarranted presumptions. However, these legislative fiats do not make the disease itself occupational. Few state legislative bodies, other than the federal government, have dictated such coverages.

The Department of Labor, in its Interim Report on Occupational Diseases uses another approach to disparage the role played by workers compensation laws in relation to occupational disease. It attempts to show that the number of diseased claimants receiving workers compensation benefits bears little or no relationship to the number of workers it has identified (in a prior chapter) as being disabled from an occupational disease. Further, the Department alleges that the benefits being paid to those that do manage to work through the system are grossly inadequate.

One of the major sources used by the Department of Labor in its Interim Report to assess the effect of workers compensation laws in occupational disease situations was a workers compensation closed claim survey done for the Inter-Departmental Task Force on Workers Compensation. Unfortunately, this source does not provide reliable data regarding occupational diseases.

We do not claim that there are no problems associated with occupational disease and the workers compensation system. Certain occupational diseases with long latency periods and complex multiple or unknown etiology do cause unique problems for the system. Today, many substances found in the workplace are being viewed as potential health hazards. The medical impacts of these health hazards over time are unknown.

More important, however, is the states' ability to respond to the problem once they are identified. We would cite the following as some examples of the activities presently underway involving the states. The U.S. Chamber of Commerce policy statement recommending to its members "that appropriate reforms of state occupational disease laws be supported where needed and that its members further use their best efforts to facilitate the enactment of these reforms." The Crum and Forster Insurance Groups report on the "Role of Workers Compensation System in Compensating Occupational Disease Victims". Although we do not support everything contained in that report, it has served as catalyst to sharpen the focus on the state workers compensation system's handling of occupational disease. Also, at the present time there is a broad based Advisory Committee on Occupational Disease preparing a report for the National Association of Insurance Commissioners. The full Advisory Committee has representatives of employers and employer groups, organized labor, insurance companies and insurance trade associations and state workers compensation administrators all considering the issues involved with occupational disease.

A Federal Program Is Not the Answer

We take serious issue with those who conclude that a federal solution is the only answer to the occupational disease problem. In prior testimony before this Congress, we have expressed our staunch opposition to the federalization of state workers compensation laws as well as federal intervention of any sort. The horrendous experience that the nation has had with the Black Lung experiment underscores our concerns.

Moreover, we do not understand why the state workers compensation system should be federalized because of problems in the tort system.

We concur with Congressman John Erlenborn's observation on H. R. 3175, the House bill aimed at an asbestos solution. In his remarks, the Congressman said that the asbestos problem is a manifestation of "not so much a workers compensation failure, as the Chairman's bill assumes, but a products liability failure--and, therefore, the remedy should be in amending our product liability laws -- not using that failure to advance an agenda of federalizing workers compensation."

The role of the state workers compensation system as the primary method of recovery in cases which also involve a cause of action based on products liability, has been recognized in a bill (S44) recently passed by the Senate Commerce Committee.

This bill entitled the "Product Liability Act", would establish a uniform federal law for all states with respect to product liability litigation. While it is not the purpose of these hearings to undertake a detailed analysis of this pending legislation, it is appropriate to note the manner in which it deals with the role of workers compensation in cases based upon a products liability theory of action.

This bill provides that when a claimant obtains a judgment based upon a products liability cause of action, the amount of that judgment will be reduced by the sum of the amount paid as workers compensation benefits for the claimant's injury and the present value of all workers compensation benefits to which the claimant is or would be entitled for the injury. The legislation also preserves the exclusiveness of remedy doctrine presently contained in all state workers compensation laws.

Thus, this proposal recognizes that in situations in which a work-connected injury may also result in a third party action based upon a theory of products liability, the primary responsibility for compensation rests upon the workers compensation system.

The entire "Product Liability Act" is receiving widespread support from the business community as being an equitable balance between the rights of injured claimants and products manufacturers and sellers.

The Alliance supports the business community in its efforts to secure this equitable balance, which enforces the concepts contained in this proposal.

Conclusion

In conclusion, we agree that some problems indeed exist in the state workers compensation system. However, there is ample evidence that these problems are being dealt with by the states.

We see no necessity for a federal program. Based on the experience with black lung, the evidence is clear that federal intervention makes the problem worse. For these and other reasons, we strongly disagree with those who call for a federal solution to a problem which can be better handled by the states.

Senator NICKLES. Mr. Bunn.

Mr. BUNN. Thank you.

The National Association of Independent Insurers believes that occupational disease reform for workers' compensation should take place in those instances where needed, at the State level.

Second, that occupational disease tort reform proposals that would use the workers' compensation system as the vehicle to achieve their goals will probably ultimately destroy workers' compensation at the State level, and leave the occupational disease tort problems unsolved.

Finally, there is a need for product liability tort reform that would impact on occupational disease, and we would prefer to see that at the State level, if possible.

Mr. Chairman, my name is Howard Bunn, and I am vice president for the National Association of Independent Insurers. NAII is a property and casualty insurance trade association comprised of over 530 member companies. We write approximately 18 percent of the workers' compensation insurance.

We appreciate the opportunity to appear before you and give you our views. Occupational disease in workers' comp, as it was traditionally set up, was to be based solely upon an employer-employee relationship. Many of the proposals that are before you and before the Congress would broaden that to include family members and others closely associated with the worker. We think this goes beyond the purview of workers' compensation, and is a document that ought not be allowed. That if there is to be some type of compensation for these persons it should be outside of the workers' comp system.

How one views the occupational disease problem, I think, is one that depends to a great extent upon where you are located in viewing the problem. There are many estimates, from those in the Labor Department that are quite large, or potentially so, to the National Council on Compensation Insurance, which will testify subsequently this morning, which tends to point out that as of right now only a few, relatively few, cases are coming into the system.

Nevertheless, we believe it to be a serious problem, and one particularly in the tort area, in need of serious scrutiny, as to some type of better resolution than we have today.

Much of the concern currently is around the State workers' compensation system, and whether or not they are adequate, and whether or not they need some type of Federal prescription. The previous two colleagues of mine in the insurance industry have outlined several areas that they believe need to be enacted in order to improve the State system.

We think that, first of all, the statutes of limitations that are prohibited and keep cases out of the system, by the mere passage of time, need to be remedied, so that it it is based primarily on when the injured person knew, or should have known that he or she had an occupational disease.

We caution, however, that as States move in this direction it could pose funding problems, and that the funding problems posed may need to have some type of special fund in order to update these benefits, because the amount of premium collected by the insurance industry may have been insufficient due to lack of knowledge at the time that the original risk was underwritten.

We further think that there is a need, along the lines of the Crum and Forster's Occupational Disease Task Force Report, and we would commend that to you and your staff to review as a compilation of the problems at the State level in workers' compensation, a very excellent one.

We also agree that there is a need to have a more objective manner in which to determine these cases. Some type of medical board, that has set some objective standards.

We also think there is a need for some data collecting agency, or private agency, preferably, other than the Government, to collect all of the updated knowledge on occupational disease, to be used at the State level.

There are several comments that we would like to make about a couple of the Federal bills that are—one Federal bill and one proposal that would deal with the tort asbestos problem and would also get into the workers' comp system.

First of all, I would like to speak briefly about H.R. 3175, which has been pending for some time in the House. We think that bill would go far beyond what is necessary to deal with the asbestos problem, we are concerned about the fact that it leads to the Secretary of Labor and HEW opening up and adding other types of occupational diseases, without sufficient criteria, as to whether or not there is a real necessity for that.

We prefer to have the Congress act, if there is ever to be something in the way of occupational disease further than as we have it today, based on some need, rather than have an agency in the Federal Government.

We are also concerned about the determination of benefits based on the national average weekly wage, rather than the workers' average weekly wage. We do not know what the cost of that would be, but we would suggest to you that it would be significant.

There are a number of other concerns that we have articulated about that bill in our statement.

On the proposal of the Committee for Equitable Compensation, which has been presented to you earlier today, we have equal concerns about that. We see the blurring of workers' compensation concepts, along with damaged concepts, the tort concept, all in one system, as a system that is—or a proposal that is likely to cause serious troubles for workers' compensation.

There are two separate motivations, we think that first of all there is likely to be a difficulty in administering the fairly significant influx of claims into the system. Most States right now, contrary to maybe a picture that has been painted to you, are having, in popular States, a considerable amount of litigation. So it is not a very orderly system, perhaps as has been presented to you. It is a system at the State level that is already carrying about all the litigation that they could possibly carry, to put into some other large numbers of cases would require more hearing officers, more administrative staff, better trained staff, and so on. Not that this could not be overcome, but we think this would pose a serious burden on the State system.

We also think it is a serious constitutional problem, in the sense that you are singling out one disease for special treatment. The pressure is going to be there, like it has been in other areas, to expand this document to other diseases, and what the cost impact of that would be ultimately is anybody's guess.

So, we argue to you that, first of all, the basic workers' comp system needs some reform at the State level, and that is where it ought to be.

On the tort issue, as presently in the asbestos area, we think that needs to be singled out as a special problem, and one to be dealt with, so we would like to see it at the State level, but if not at the State level, the Congress has to deal with that issue. It should be some limited prescription, and not some broad type of cure that would expand into all types of occupational diseases, perhaps not needed at this point.

Thank you.

[The prepared statement of Mr. Bunn follows:]

PREPARED STATEMENT OF J. HOWARD BUNN

The National Association of Independent Insurers believes:

- Occupational disease reform for workers' compensation should take place where needed at the state level.
- Occupational disease tort reform proposals that would use the workers' compensation system as the vehicle to achieve their goals will destroy workers' compensation and leave the occupational disease tort problems unsolved.
- Product Liability tort reform impacting on occupational disease where needed should be the responsibility of the states.

Mr. Chairman and members of the Labor Subcommittee, my name is Howard Bunn, Vice President, National Association of Independent Insurers (NAII), the largest trade association of property and casualty insurance companies in the United States, comprised of over 530 member companies. We appreciate the opportunity of appearing before you today to present our views.

"Occupational disease" in its traditional interpretation usually refers to work related disease contracted by an employee and which arose out of and in the course of employment. Workers' compensation is based on the employer - employee relationship. It was never intended to reach out and cover family members or the public at large.

Whether or not occupational disease is being dealt with in a reasonable manner varies from state to state. How one views this issue also depends on one's perspective. For instance, the federal government studies by the Labor Department have found the magnitude of the problem to be quite large or potentially so. The data collected by the National Council on Compensation Insurance to date reflects a relatively low number of cases actually coming into the system. We believe it to be difficult to accurately quantify. Nevertheless, we expect the concerns of occupational disease to be sufficiently serious well into the future - just as is the case today.

Much of the debate revolves around the "status" of the state systems and whether or not existing deficiencies can be remedied at the state level or whether it will be necessary to enact some type of federal remedial legislation to correct these problems. A further related set of issues pertain to the third party liability cases (e.g. asbestos), which some proposals would solve by utilizing the current workers' compensation system as the vehicle to correct current tort concerns.

Further, other somewhat related issues such as environmental compensation proposals, toxic torts, product liability reform, all tend to create a picture of connected concerns that are yet very different in their individual characteristics, but in need of overall policy coordination.

Inasmuch as we perceive these hearings to be of a general nature delving into both workers' compensation and tort approaches to occupational disease, it will be our intention to comment generally on each of these areas of concern.

Workers' Compensation - Occupational Disease

Since the Report of the National Commission on State Workmen's Compensation Laws all states have amended their laws, where needed, to provide full coverage of occupational disease claims. Likewise, unlimited medical care is now provided in all states. These are important steps toward assuring a responsive occupational disease/workers' compensation program.

There are several aspects of the laws dealing with occupational disease in workers' compensation that are in need of improvement. We recommend the elimination of existing state legal compensability restrictions based on exposure criteria that are unrelated to medical and other scientific evidence. Two other "O.D." areas that need change are restrictive statute of limitations on filing claims and deficient procedures for handling long latency occupational diseases.

The recent Report of Crum and Forster's Occupational Disease Task Force is an excellent review of the systems "O.D." problems. It also poses specific solutions to these concerns. While we do not agree in total with the report, we believe this work to be a valuable contribution, one which provides a reference point to persons doing research and reform in this area. Since that report goes in depth into nearly every aspect of occupational disease, we will not attempt to replicate its comprehensive nature. Rather, we will elaborate on several trouble spots in need of reform.

* Restrictive statutes of limitations - statutes of limitations that bar filing of claims by the mere passage of time and without regard to whether or not the claimant had knowledge that he or she had the occupational

disease should be repealed in favor of laws stating that time limits within which claims must be filed should start at the time the claimant knows or should have known of the existence and potential compensability of the disease. The importance of this type of statutory revision to long latency claims is clear. Work related respiratory diseases frequently carry a long period of time lapse between exposure and the time the work related disease manifests itself - thus, the unfairness of restrictive statutes of limitations.

Opening the statute of limitations as suggested may bring with it, however, problems of funding. Insurance premiums may have been based on a set of circumstances believed to be in place at the time of underwriting the original risk. The facts known at that time may not have taken into account any significant potential for occupational disease claims to be filed. Ergo, with a de minimus premium having been collected, where does the money come from to pay these claims being filed today? If the number of claims turn out to be relatively small in number, then the carrier may be able to absorb them without problem. However, if the number is large, then there may have to be some type of funding mechanism developed to deal with this surge of claims. Such a mechanism could be publicly funded or with contributions from employers and carriers on a formula basis. The problem posed would apply equally to state funds and self-insurers caught in this dilemma.

The funding problems should be dealt with at the time the statute of limitations is revised. Dealing with these issues separately is opening the door for insolvencies to occur.

* Deficient Procedures for handling long latency occupational diseases. The filing of a long latency disease claim immediately poses procedural problems to the general structure of the system. For instance, once the

claim is filed with the workers' compensation agency, there is a requirement in most states that indemnity benefits begin within a short time frame, usually 3-7 days. Because long latency disease claims usually require a considerable amount of investigation by the employer or carrier (e.g. exposure may have been twenty years previous, employer may be out of business or merged with another employer, records may be difficult to obtain, etc.). This investigative time lag may require the employer or carrier to deny the claim for the moment, although eventually compensability may be accepted. Statistically this is carried as a "litigated case." This skewing of statistics shows a higher rate of litigation than is true. Some workers' compensation agencies under current laws can deal with this concern by allowing an extension of time to complete the investigation. What would be better would be a section of the law designed to accommodate these unique cases. Such a provision would establish some reasonable framework that investigations had to be completed within absent a showing of further time necessary to complete the information needed to accept or deny compensability.

* Crum and Forster have suggested two other areas procedurally that are deserving in principle of support. "A national, independent, non-profit organization should be established to compile relevant data from the various medical and scientific disciplines and provide this information to the states for use in administering their workers' compensation systems." (Crum and Forster, p. 16). This compilation of data could be of inestimable value particularly to administrators or hearing officers whose plight is to evaluate the frequently lengthy accumulation of evidence and render an award in the case. Finding financial support for this endeavor is the problem - one we trust could be overcome by contributions on an equitable basis from insurers, employers, self-insurers, etc.

Crum and Forster's second major procedural recommendation is as follows: "States should establish separate Compensability Evaluation Units (CEUs) and Disability Evaluation Units (DEUs) for disposition of occupational disease cases within the state's workers' compensation administrative agency. The CEU's will develop medical guidelines and procedures for determining the compensability of occupational disease claims. (Crum and Forster, page 16) The Interdepartmental Workers' Compensation Task Force in its report made similar recommendations, viz.: "To provide clear information and equitable decisions in this difficult area for workers and employers, we recommend that each state establish a panel of experts, including or using the advice of physicians, industrial hygienists, and epidemiologists, to determine the compensability of occupational disease cases in that State. The findings of this panel of experts should be binding as to all questions of fact or causation except for questions of law. This approach should increase the consistency and fairness of the decisions on Compensability of Disease." (Report of the Interdepartmental Workers' Compensation Task Force, page 13).

Both Crum and Forster and the Task Force Report are groping with concepts to provide more objectivity, fairness and equity into the occupational disease - workers' compensation determination process.

Several caveats are in order based on the experience of two states which have moved in this direction with adverse results (Maryland, South Carolina):

a. Determine whether or not the experts are going to be available in sufficient number and quality to carry out the mandate of the expert panels. In populous industrial states regional panels may have to be utilized thus necessitating "more experts." A corollary issue is who will pay these experts - government, if so, how much and is the amount enough to attract the experts desired? Or the private sector and if so, how do you maintain objectivity or what assessment or funding mechanism is used?

b. Avoid allowing any persons connected with vested interest groups to gain a dominant influence on the panel's makeup. This occurred in Maryland and with it a loss of credibility and objectivity.

c. Where possible objective guidelines should be developed and used in the determination of the various issues. These should be based on the most current medical and scientific knowledge available.

Legislative Proposals

Asbestos-related diseases have raised a number of significant issues for the tort liability and workers' compensation systems. The importance of these issues explains why so much attention and study has been focused on them. This special attention and study is justified, but it has not yet been sufficiently established that the problems associated with compensating the victims of asbestos-related diseases should be solved by federal legislation.

Certainly, neither of the two major proposals for federal legislation to address asbestos-related diseases, H. R. 3175 and the proposal of the Committee for Equitable Compensation, is a satisfactory solution.

H. R. 3175 would establish a federal system for compensating deaths and disabilities related to exposure to asbestos in the workplace. The bill's creation of this new federal system is based on an allegation that the state workers' compensation systems are unable to cope with asbestos-related disease cases. This allegation is simply not supported by facts. The facts are that relatively few workers exposed to asbestos have sought remedies through workers' compensation. At the same time, there is evidence that nearly 9 out of 10 asbestos workers who have filed workers' compensation claims have received workers' compensation benefits. The state workers' compensation systems must not be so casually displaced by allegations which are not supported in reality.

In addition to the fact that the federal compensation system proposed in H. R. 3175 is built on weak, unproven premises, the proposed system itself is seriously flawed. The proposed system would use unscientific presumptions to establish eligibility. The system would latch on to the federal procedures and administration of the Longshoremen's and Harbor Workers' Compensation Act, even though the Act's administration has been less efficient than the administration of most state workers' compensation systems. The U. S. Government is excluded from the obligations of the system, even though the Government's actions during World War II were directly responsibile for asbestos exposures that are the basis for the majority of asbestos-related disease claims. The system would pay benefits from an Employee Compensation Insurance Pool. But the use of the word "insurance" is misleading. Employers and asbestos producers are supposed to purchase insurance for their Pool assessments, however, coverage for assessment payments lacks the risk spreading characteristics of insurance.

Perhaps the most disturbing feature of H. R. 3175 is its provision for the inclusion of diseases caused by toxic substances other than asbestos in its compensation system. This creates a ready means to expand an ill-conceived system. Moreover, the expansion would be triggered by an administrative procedure which lacks sufficient legislative safeguards.

The proposal put forward by the Committee for Equitable Compensation would use the state workers' compensation systems to solve the asbestos tort problems. The current climate of state workers' compensation systems is one of increasing litigation and costs. Workers' compensation is a no-fault system based on economic or wage loss, torts on payment of damages predicted on fault. The overburdening of the comp system with claims with differing motivation is likely to destroy the comp program and leave the tort system in a quagmire of unresolved problems. The CEC proposal we believe poses serious constitutional concerns. Singling out a specific disease for special treatment smacks of a violation of the "equal protection" clause. From an insurance perspective, the assessment formula would cause workers' compensation carriers to have to assume a large portion of claims costs that in many instances would be paid by the general liability carriers. The proposal is simply "wrong-headed." The compensation system is today carrying as much water on its shoulders as it can bear. We believe no good can come from the CEC approach.

In conclusion, the NAII supports reform of the state workers' compensation laws dealing with occupational disease where needed. This is the general approach advocated by Crum and Forster in its report and in the recently adopted policy of the U. S. Chamber of Commerce. Further, we believe that a coordinated policy approach for workers' compensation, toxic torts, environmental compensation, etc. as is being developed by the U. S. Chamber of Commerce in its Ad Hoc National Business Council on Injury Compensation is deserving of serious study and evaluation as a way to proceed. Many of these programs have a kinship and need policy coordination.

The asbestos-tort problems remain troublesome. We have viewed seriously the federal proposals directed at having an impact on resolving the tremendous amount of litigation spawned in this area. None so far has presented a viable solution. Tort reform impacting on occupational disease is needed - preferably at the state level.

There are no easy answers at the state or federal level to the complex issues of occupational disease. The "Black Lung" federal program still conjures up visions of an occupational disease program gone awry. We, therefore, elect to direct our efforts at reform to the state level which we believe to be more responsive to injured or ill workers' needs and more sensitive to the social and economic climate impacting on employers and the insurance industry.

Senator NICKLES. Thank you very much for your response.

Mr. O'Day, I will ask your opinion of the Miller bill, H.R. 3175.

Mr. O'DAY. We testified on the Miller bill in the House, complete opposition to it.

Mr. FLOCKHART. So have we, Senator.

As I said, we are committed to the State workers' compensation system.

The Miller bill would be an intrusion in that area.

Senator NICKLES. Mr. Bunn indicated a couple of reasons for opposition. Mr. Flockhart, you prefer to see the States move?

Mr. FLOCKHART. Yes.

Senator NICKLES. How do you respond? You mentioned that States work OK, except for possibly some problems with the statute of limitations.

How do you respond to the question when you hear these cases are laying around for years and tied up in litigation? Are those strictly tort cases where they are held up? If there is a case made in workers' comp for occupational disease, are they responding in a timely manner?

Mr. FLOCKHART. I think they are responding. I do not think we see in occupational disease the prompt response that we do see in traumatic diseases, but I think that is fairly reasonable in light of the complexity of the disease issues, in light of issues such as multiple causation, the impact, for instance, on cardiovascular problems resulting from smoking and other life styles that interplay with the disease element in the workplace.

So the issues are much more complex. In many instances the issue of lung cancer and its relationship to the workplace, we just do not know what is causing lung cancer. We do know the adverse effect of smoking. So these are additional complex issues.

I do believe, at least it is our understanding that the workers, compensation system is responding within around 18 months, which is better than the tort system is doing, insofar as that is concerned.

Senator NICKLES. If an individual does make a claim in the State of Virginia, and worked at XYZ under workers' comp, you think the average waiting time to receive some type of settlement would be within 18 months?

Mr. FLOCKHART. I am not so sure that I would say average, Senator. Those are the figures that essentially we have had. And other States, for instance, Senator Dodd, as you may know, had a panel hearing on this issue up in Connecticut, I am told, the agency, the spokesman for the agency said that these cases are being resolved in that State in about 2 years, 18 months to 2 years.

Senator NICKLES. Mr. O'Day, if an individual has an asbestos related occupational disease, does he file under workers' comp, or are most people just going the tort route?

Mr. O'DAY. As far as we can see, most of them are not filing under work comp. But the studies would indicate that when they do file under work comp, that a very, very high percentage receive benefits.

Even Dr. Selikoff's studies would indicate that in the neighborhood of 85 to low 90 percent of the people making claims receive benefits under the system.

The point is that most of them do not file claims under the workers' compensation system.

Senator NICKLES. To carry that further, if I was working for XYZ Company, and felt like I had an asbestos related disease, why would it not behoove me to file under workers' compensation like I would in any other type of occupational related injury?

Mr. O'DAY. There is a variety of reasons. There is no single reason that one could name. One, Mr. Flockhart touched on a moment ago, it does take time to determine those cases under the compensation system, because they are complex.

To the extent that you are involved in the compensation system, there may be a belief it hurts your case in the product liability system.

Senator NICKLES. But conversely, if you were successful, it would probably assist your case.

Mr. O'DAY. It could, except there is an offset of the amount of money that you get under workers' compensation, so some may see that as hurting.

Senator NICKLES. If you are successful in a tort case, and previously had been successful in a workers' comp case, then the amount of award that you received in the tort case would be reduced to offset the income that you received in workers' comp?

Mr. O'DAY. It should.

Mr. FLOCKHART. Subrogation of workers' compensation.

Another one that I think we should touch on for the record is that a lot of cases that are being filed under the tort system would not be compensable under the workers' compensation system. Workers' compensation responds to loss of wages, but generally it is disability, which the system responds to. That is there is an impairment which prevents the individual from receiving the wages prior to the disability, or the entire wage prior to the disability.

In some of these cases people, while they are injured, and have a disease, they can still maintain their—they are still working, so there would be no recourse, other than medical benefits under the workers' compensation system, but there would be recourse or recovery for injury under the tort system. That is another element.

Senator NICKLES. Mr. Connolly, do you want to make a few remarks?

Mr. CONNOLLY. I just want to make it clear that the recovery would be the same, even under the tort system, even if a party went to the comp system. The offset is that the money is returned to the comp system, but the claimant still recovers full damages.

Senator NICKLES. They are looking at what the end result will be and what they can get from the tort side, period. Why go through the additional hazard and expense of working on the comp side if you get something revved up in 1½ years versus 5 years?

Mr. CONNOLLY. That is correct.

Senator NICKLES. Yes, Mr. Bunn?

Mr. BUNN. Well, I just wanted to second what Mr. Flockhart just said a while ago.

I think you will find out subsequently when Mr. Woodward testifies before you, that in a fairly good number of these cases there is just no disability or wage loss, as is necessary in order to make out a workers' comp claim. So if you cannot make out a workers' comp claim, you are going to go straight to the tort system.

Second, along that same line, you may very well have an enlarged number of these cases due to the long latency period, people who have already retired, and are out of the work force, and there is no wage loss there, either.

So I think that a farily good number of the cases are going straight to the tort system out of necessity. Some of them, due to the fact that the lawyers convinced them that there is just more money there, and no need to fool with comp.

I think a third thing in responding to a point you raised a while ago, about litigation, and the amount of litigation, and I mentioned this in the paper, is that because a good many of the State workers' comp laws require you to accept or deny liability within a short period of time, and start paying, or even saying it is going to be litigated, this tends to skew the statistics on occupational disease cases, because as Mr. Flockhart pointed out, many of them involve businesses, and exposure, 15 to 20 years ago, and you have got to dig into old records, you have got to do a lot of investigation, in order to decide whether or not to accept or deny, and frequently, after all this is completed, companies go ahead and accept liability.

But just due to the investigative process, you automatically have to deny, initially, that you are liable, in order to give you some time to investigate.

Some States will allow you to file a motion to—for extension of time, some will not. So I think the statistics on litigation are, while a good many of them are, I think, legitimately litigated, I think that there are also probably more cases indicated that are litigated than actually turn out to be in the final analysis.

Senator NICKLES. On Tuesday, last week, we heard testimony on the high defense costs now associated with insurers and defendants suing each other over which insurer is liable for what portion of asbestos disease, and over who will pay the defense costs.

Are these issues anywhere near being resolved?

Mr. CONNOLLY. I think you had testimony from Mr. Baldwin and others that there is a private effort to work on that. One hopes that that will be successful. It appears to be moving toward some sort of resolution which would be favorable.

Senator NICKLES. OK, I would hope so.

Two or three of the panelists today have mentioned that defense costs and litigation costs on both sides are astronomical. The actual claimant, the injured worker, is down on the totem pole as far as the dollars received.

The subcommittee is also told that the so-called Wellington group is nearing agreement on how to handle asbestos litigation.

If agreement is reached, in your view, would this solve the asbestos-related problems?

Mr. CONNOLLY. I think it would be helpful. We are not a part of the Wellington group, so I cannot tell you precisely what is going on in that group.

I think that a resolution that would be reached between the producers of asbestos-related products and insurers and claimants, voluntarily agreeing to proceed, would be a step in the right direction.

If all agreed, obviously they felt they were getting something of benefit.

Senator **Nickles**. Do you have any other comments?

Mr. **Bunn**. I think the Wellington group, and what they are after, is an effort to be commended, but our perspective on it has been all along that it is a very difficult concept to pull off in the final analysis, and I think while there is considerable ballyhoo, that a couple of weeks ago a basic final concept had been agreed upon, as I understand it, one of the major players in that just recently indicated that they would not be able to participate in it, Travelers, Ray Stall of Travelers had been the person basically chairing from the insurance industry, the people trying to get together, and as it turns out his own company has, at least as I understand it, from the news releases, as of this moment, decided not to participate.

So I think it could contribute significantly, but it is one of these very, very intricate things, it is very difficult to put together.

Senator **Nickles**. A couple of the panelists said that various States need to make changes in their workers' comp system concerning the statute of limitations, and possibly the wage base, to determine whether or not payment was on wages that an individual had at the time of their retirement or injury.

Are those changes actually taking place?

Mr. **Flockhart**. I regret that we have not had a very successful year thus far.

The State of South Dakota passed—both Houses of the legislature, that would eliminate a residency requirement. Unfortunately, the Governor vetoed that legislation.

I am not aware to date of any other occupational disease legislation that has been enacted in 1984, unless my colleagues are.

Mr. **O'Day**. No, I am not aware of any fantastic action that has occurred.

I think, realistically, Senator Nickles, you have to look at it as a learning curve that has to occur there, and that learning curve is just starting.

Recently you had the U.S. Chamber, the National Association of Manufacturers, coming out with statements to their local people that they should be addressing this problem at the local level.

Your colleague, Senator Hatch; your colleague, Congressman John Erlenborn, have been making speeches to the business community over the last year or so, urging them to address these problems.

Again, it is the local people who have to come to grips with it. It is not the Washington community, whether it is the Federal Government, or the associations, or anybody, who have to come to grips with it. It is the local people, the local associations, the local business people, the local labor groups, et cetera, who must understand that it is in their best interest to make whatever changes that are needed in their own local law. They resent us coming in, just as much as they would resent the Federal Government coming in and telling them what to do.

So they have a learning curve that is just starting. It needs to be moved forward.

Senator **Nickles**. If some States do not make the necessary changes concerning the statute of limitations, and other needed corrections, should the Federal Government come in and mandate those changes?

Mr. **O'Day**. No.

Senator **Nickles**. It is the shortest answer that I have ever heard before this committee.

Any other comments?

Mr. **Bunn**. We agree with that.

Mr. **Flockhart**. So do we, Senator.

Mr. **O'Day**. That is no solution, at all. The Federal Government intervention just really worsens the problem. It does not correct the problem. You just create a whole new set of problems.

If the Federal Government could put help to them, in terms of explaining it, give them manpower, whatever, maybe something like that. Peer pressure more than anything else will make the necessary changes.

I think educating them that is really in their economic best interest to make the changes now. Yes, it may cost them something more today, but if they do not make the changes, and ultimately the Federal Government does make those changes, it is going to cost them a heck of a lot more.

Senator **Nickles**. Could we not give them, as a shining example, our Federal Employee Compensation Act, or our Longshore Act, as a way to set up their State compensation system?

Mr. **O'Day**. Not a very good way to go.

Senator **Nickles**. Some might suggest that. I am being a little facetious.

I appreciate your cooperation before this committee. I have additional questions and would appreciate your responses to those, as well.

Thank you very much.

Our next panelist Kevin Ryan, President of the National Council on Compensation Insurance.

Mr. Ryan, welcome.

STATEMENT OF KEVIN M. RYAN, PRESIDENT, NATIONAL COUNCIL ON COMPENSATION INSURANCE, NEW YORK, NY

Mr. **Ryan**. Senator, thank you for giving the National Council on Compensation Insurance an opportunity to testify before the subcommitee.

The National Council on Compensation Insurance is a voluntary, nonprofit, research, statistical and ratemaking organization, specializing in workers compensation insurance. We are supported by 696 insurance companies and State funds, who are our members of subscribers, and to whom we provide our services. Our primary function is the collection of workers compensation statistics and development of workers' compensation costs.

I wish to emphasize that we are not a lobbying group and cannot state the insurance industry's position in legislative matters. However, as a national rating organization for for workers compensation insurance, the National Council has access to a great deal of information bearing on occupational disease, and we would like to share that with you.

Occupational disease claims are work-related disabilities resulting from the inhalation, absorption, or ingestion of disease-causing agents in the claimant's workplace. If we exclude black lung claims, they represent 1 percent of workers compensation claims, and 2 percent of the total benefit costs. Asbestos claims are but a fraction of such claims.

Occupational disease claims arise from virtually every occupation in this country. There are about 600 classifications used in writing workers compensation insurance policies. Each classification is for a specific type of business and has its own rate. In no occupational classification, other than coal mining, do these claims account for more than 4 percent of all workers' compensation claims.

Occupational disease accounts for more than 1 percent of the workers compensation claims in about half of all occupational classifications. While the level of occupational disease varies by industry, and accounts for a small share of the total workers' compensation cost, it does appear in almost every type of employment.

Exhibit I shows the various kinds of occupational disease compensated under State workers compensation programs, their relative frequencies and average benefit costs per case. It is perhaps instructive to note that disease claims, on the average, are more than twice as costly as the traumatic claims that arise from a single injury.

Asbestos claims appear in approximately 50 occupational classifications. The classification producing the most asbestos claims is plumbing—including steam pipe and boiler insulation. This classification accounts for approximately 29 percent of all workers' compensation asbestos claims. An additional 30 percent of all asbestos claims are produced by the following four classifications:

1. Carpentry (including insulation work).
2. Asbestos goods manufacturing.
3. Clerical.
4. Sheet metal work.

These classifications account for 13 percent, 7 percent, 7 percent and 3 percent, respectively, of all asbestos claims. Asbestos claims total approximately 7 percent of all occupational disease claims, and 11 percent of all occupational disease benefit dollars.

Based upon a sampling of approximately 300,000 lost time—or indemnity—workers' compensation claims filed since April 1, 1979, asbestos claimants have received workers' compensation lost work time benefits averaging $16,900 with a single claim high of $225,000. Medical benefits for these claimants have averaged $2,700, with a high of $55,000.

The age of asbestos claimants when the claim is received by the insurance carrier ranges from 23 to 94, with an average age of 58.

If we define the latency period to be the amount of time from last asbestos exposure to the time of disease manifestation, we find an average asbestos latency period of approximately 9 years. Claims can have a latency period of less than 1 year, or more than 40 years.

Workers' compensation has been responsive to asbestos claimants who use the system. Half of the claimants receiving benefits have had their claims resolved within 18 months of filing. By comparison, under the Federal Black Lung Program it has taken over 4 years, on the average, to reach the point where 50 percent of the claims filed have been resolved. The success rate for asbestos claimants is approximately 68 percent. That is, 68 percent of all workers filing asbestos-related claims receive indemnity and/or medical benefits.

The weekly workers' compensation indemnity benefit for asbestos claimants has averaged 65 percent of the claimant's pre-injury spendable income.

Transaction costs have remained much lower for asbestos claims handled under the workers' compensation system. Insurance carrier handling costs, called claim adjustment expenses, for asbestos claims have averaged 20 percent of the amount paid to the claimant. As an example, a typical workers' compensation benefit of $20,000 would carry a claim adjustment expense of $4,000. This should be compared to the tort system, where the typical asbestos claim adjustment expense equals the cost of the benefit to the claimant.

State workers' compensation benefit programs are constantly being upgraded. Last year, for example, approximately 1,000 State laws were enacted affecting workers compensation.

Our organization evaluates the cost of enacted legislation. These proposals come from employers, labor unions, legislators, regulatory authorities, insurance companies, and other groups concerned with workers compensation.

We were recently asked to evaluate the cost of proposals to provide occupational disease benefits based upon the worker's wage at the time of the manifestation of the disease rather than the date of last exposure, and also a change in the statute of limitation, applying it to the date of manifestation, and not the date of last exposure. If applied nationally, these changes would affect approximately one-third of the States. The remaining two-thirds already have the less restrictive conditions. A detailed report of our findings has been attached to my statement as exhibit II.

In casualty insurance, the premium paid by the policyholder must be sufficient to prefund all claims charged against the policy for that year. There is no provision for recouping claim costs from an expired policy, even though claims may be filed against a policy long after it has expired.

Recognizing the nature of casualty insurance, NCCI first evaluated only those claims where the date of last exposure would be on or after the effective date of the proposed legislation. We estimate that the changes in occupational disease benefit computation and statutes of limitation described above would increase workers' compensation costs from a low of 0.3 percent in Kansas to a high of 3 percent in Alabama.

If a legislature were to make these changes it is possible, and perhaps likely, that they would also apply to workers whose last exposure was prior to the effective date of the legislation. We estimate the cost of funding such claims to be approximately $300 million, beyond the rate increases cited above.

In conclusion, Mr. Chairman, our countrywide insurance company data shows that the State workers' compensation system copes with and responds to asbestos related occupational disease claims that enter the system, by providing wage replacement, medical benefits and rehabilitation, consistent with State workers' compensation laws, on a timely basis.

The National Council on Compensation Insurance will continue to monitor the State workers' compensation system through the data we collect. The analysis of such data is essential to evaluate the cost of funding responsible Federal and State occupational disease proposals.

I appreciate the opportunity to testify on this important subject. I hope my comments have been helpful. We stand ready to assist this subcommittee in any way we can.

I will be pleased to answer any questions you might have.

Thank you.

[The prepared statement of Mr. Ryan and responses to questions submitted by Senator Nickles follow:]

Statement of Kevin M. Ryan, President
National Council on Compensation Insurance
Before the
Subcommittee on Labor
of the
Committee on Labor & Human Resources
United States Senate
April 30, 1984

Mr. Chairman and Members of the Subcommittee:

The National Council on Compensation Insurance (NCCI) is a voluntary, non-profit, research, statistical and ratemaking organization, specializing in workers compensation insurance. We are supported by 696 insurance companies and state funds, who are our members or subscribers, and to whom we provide our services. Our primary function is the collection of workers compensation statistics and development of workers compensation costs.

I wish to emphasize that we are not a lobbying group and cannot state the insurance industry's position in legislative matters. However, as a national rating organization for workers compensation insurance, the National Council has access to a great deal of information bearing on occupational disease, and we would like to share that with you.

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Occupational disease claims arise from virtually every occupation in this country. There are about 600 classifications used in writing workers compensation insurance policies. Each classification is for a specific type of business and has its own rate. In no occupational classification, other than coal mining, do these claims account for more than 4% of all workers compensation claims. Occupational disease accounts for more than 1% of the workers compensation claims in about half of all occupational classifications. While the level of occupational disease varies by industry, and accounts for a small share of the total workers compensation cost, it does appear in almost every type of employment.

Exhibit I shows the various kinds of occupational disease compensated under state workers compensation programs, their relative frequencies and average benefit costs per case. It is perhaps instructive to note that disease claims, on the average, are more than twice as costly as the traumatic claims that arise from a single injury.

Asbestos claims appear in approximately 50 occupational classifications. The classification producing the most asbestos claims is plumbing (including steam pipe and boiler insulation). This classification accounts for approximately 29% of all workers compensation asbestos claims. An additional 30% of all asbestos claims are produced by the following four classifications:

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If we define the "latency period" to be the amount of time from last asbestos exposure to the time of disease manifestation, we find an average asbestos latency period of approximately nine years. Claims can have a latency period of less than one year or more than 40 years.

Workers compensation has been responsive to asbestos claimants who use the system. Half of the claimants receiving benefits have had their claims resolved within 18 months of filing. By comparison, under the Federal Black Lung program it has taken over four years, on the average, to reach the point where 50% of the claims filed have been resolved. The success rate for asbestos claimants is approximately 68%. That is, 68% of all workers filing asbestos-related claims receive indemnity and/or medical benefits.

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State workers compensation benefit programs are constantly being upgraded. Last year, for example, approximately 1,000 state laws were enacted affecting workers compensation. Our organization evaluates the cost of enacted and proposed legislation. These proposals come from employers, labor unions, legislators, regulatory authorities, insurance companies, and other groups concerned with workers compensation.

We were recently asked to evaluate the cost of proposals to provide occupational disease benefits based upon the worker's wage at the time of the manifestation of the disease rather than the date of last exposure, and also a change in the statute of limitation, applying it to the date of manifestation, and not the date of last exposure. If applied nationally, these changes would affect approximately one-third of the states. The remaining two-thirds already have the less restrictive conditions. A detailed report of our findings has been attached to my statement as Exhibit II.

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If a legislature were to make these changes, it is possible, and perhaps likely, that they would also apply to workers whose last exposure was prior to the effective date of the legislation. We estimate the cost of funding such claims to be approximately $300 million, beyond the rate increases cited above.

In conclusion, Mr. Chairman, our countrywide insurance company data shows that the state workers compensation system copes with and responds to asbestos-related occupational disease claims that enter the system, by providing wage replacement, medical benefits and rehabilitation, consistent with state workers compensation laws, on a timely basis.

The National Council on Compensation Insurance will continue to monitor the state workers compensation system through the data we collect. The analysis of such data is essential to evaluate the cost of funding responsible federal and state occupational disease proposals.

I appreciate the opportunity to testify on this important subject. I hope my comments have been helpful. We stand ready to assist this subcommittee in any way we can.

I will be pleased to answer any questions you might have.

Thank you.

EXHIBIT I

OCCUPATIONAL DISEASE EXPERIENCE*

Disease	Relative Frequency	Average Indemnity Cost per Case	Average Medical Cost per Case	Average Total per Case
Dust Disease	8%	$19,800	$1,700	$21,500
Asbestos Related	7%	16,900	2,700	19,600
Disease Byssinosis	1%	16,100	2,700	18,800
Silicosis	5%	41,600	3,300	44,900
Other Respiratory Disorders	46%	7,500	1,400	8,900
Poisoning-Chemical	6%	6,300	1,600	7,900
Poisoning-Metal	2%	2,000	1,200	3,200
Cancer	2%	15,000	1,900	16,900
Other OD*	23%	7,900	1,300	9,200
All O. D. Claims	100%	$10,800	$1,700	$12,500
Traumatic Injuries		$3,600	$1,600	$5,200

*Does not include Black Lung, rounded to nearest hundred or nearest percent.

EXHIBIT II

OCCUPATIONAL DISEASE
EXPANSION OF STATE BENEFITS

Prepared by Actuarial Operations Division
National Council on Compensation Insurance
February 1984

NATIONAL COUNCIL ON COMPENSATION INSURANCE February 28, 1984

SCOPE OF REPORT

This report is based on the statutes as written in each state's Workers' Compensation Act. Sometimes current practices are not in direct accordance with the interpretation at these statutes gained through careful reading. The Administrators of each state's law are being contacted to check for this possibility. Therefore, the results of this study are applicable only to the extent that current practice conforms to the described interpretations (tables 1 and 2) of the statutes.

Workers' Compensation claims reported in the last several years, including experience from several states without "closed" statutes of limitations, serve as a basis for the examination of the proposed change due to the expansion of state benefits. No attempts were made to adjust this basis to include any increased or decreased utilization of occupational disease benefits in future years. Therefore, the results assume a constant utilization of occupational disease benefits over time.

It must be carefully noted that we have taken "occupational disease" to mean only those diseases set forth on table 3.5. This would exclude some types of claims where delays in claim filing often occur such as loss of hearing, mental disorders, and cumulative trauma. The wording of the individual state legislative proposals under question would be needed to determine whether or not these claims would have to be brought into our calculation.

CURRENT LAW

State workers' compensation laws vary with respect to filing requirements for occupational disease. Some states have a statute of limitations which restricts workers' compensation occupational disease claims to a specified time period after the worker's last exposure to the harmful agent causing the disease. These types of statutes are often called "closed". Other states have a statute of limitations which restricts workers' compensation occupational disease claims to a specified time period after the disease manifests itself, or after disability commences, or after the worker becomes aware that his work exposure and disease are causally related. These statutes are much less restrictive for the claimant. Still other states have no limit on the time period for filing occupational disease claims.

State workers' compensation systems also vary with regard to weekly benefit computation for occupational disease claimants. While most states calculate weekly benefits based on the wage at the time of disease manifestation, others require that the worker's weekly benefits be based on the wages at the time of last injurious exposure to the disease-causing agent.

Since many diseases have long latency periods, workers may become aware that they have an occupational disease many years after their last occupational exposure to the disease. Therefore, the provisions set forth above may significantly impact both the number of claimants eligible for benefits and the magnitude of the weekly benefit received.

PROPOSED BENEFITS

In response to a request from the American Insurance Association (AIA), NCCI has estimated in selected states the impact of the following benefit changes for occupational disease claimants:

i) Eliminate the "closed" statute of limitations as described above. Claims will be barred only after 2 years have expired since the date the claimant knew or should have known of the disease, or the date of death.

ii) Base benefits on the wage at the time the claimant knew or should have known of the disease, or the wage at the time of death.

The states with "closed" statutes of limitations are listed in Table 1 and the states where benefits are based on the wage at last exposure are shown in Table 2. Both of these tables were obtained directly from the American Insurance Association.

RESULTS

Statewide Impacts

Occupational disease loss costs are expected to increase dramatically; overall loss costs are expected to increase slightly. The states' current statutes, the current percentage of occupational disease, the impact on disease costs and the overall impact on statewide loss costs are shown in Table 3.

Results by Disease

Table 5 shows the impact on each state's overall loss costs, as well as the impact on each disease within the state. Due to the presence of the federal black lung program and separate manuals for reporting experience, deep mine experience has been excluded entirely. The amount of losses and impact shown for black lung includes state act disease losses only. This executive summary includes Alabama's Table 5.

OBSERVATIONS

Latency Periods

The magnitude of the effects on occupational disease costs is also dependent on the type of statute. The effects are further dependent on the types of occupational diseases within the occupational disease costs. One would expect that the longer the latency period of the disease, the larger the effect would be on that disease. This is not strictly true. Individual worker characteristics differ from industry to industry. The time from last exposure to disease manifestation is not necessarily longer for diseases with longer latency periods. The diseases which exhibit longer periods of time between last exposure and manifestation will increase more than diseases with shorter periods of time between last exposure and manifestation. The average latency period and time between last exposure and manifestation are shown for each disease in Table 3.5.

Overall Cost Impact

The magnitude of the overall impact on loss costs in any given state of removing the "closed" statutes of limitations and basing benefits on the worker's wage at the time of disease manifestation is dependent on two critical factors. The first, of course, is how restrictive the state's statute of limitations is, and whether or not benefits are currently based on the wage at last exposure. The second factor is the amount of occupational disease vs. non-occupational disease losses. The more restrictive the statutes, the larger the impact (other factors constant). The larger the percentage of current disease losses, the larger the impact (other factors constant).

METHOD - SUMMARY

Sparcity of Data

Consistent with all law evaluations pricings, the overall effect of the change is computed by comparing the total monetary cost under the current law with the total monetary cost under the proposed law. Since data is not available in each state with the level of detail necessary to immediately determine the proposed cost, a model was constructed.

Model to Produce Increase Cost Factors by Type of Disease

The model was constructed in such a manner to return an increase factor for each category of disease in each state depending on the current statute of limitations and the date of the wage for the calculation of workers' compensation benefits.

Disease Occurrence Within Individual States

Once these increase factors are computed, it is necessary to determine the amount of each state's losses which are in each category of disease. The present monetary cost is simply the total losses in the state. The proposed monetary cost is determined by multiplying each state's losses in each category of disease by the appropriate increase factor representing the change.

In Summary

The model, therefore, is a three-step process:

i) Determine appropriate increase factors depending on the statute of limitations, the occupational disease, and the time at which the benefits are computed.

ii) Determine the current amount of losses in each category of disease for each state where the statute of limitations or time at which benefits are based is proposed to change.

iii) Multiply the increase factors (1) by the amount of losses (2) to determine the proposed monetary cost. The present monetary cost, of course, is known and, therefore, the average cost impact by state will follow directly.

METHOD - DETAILS

Distribution of Disease Emergence Over Time

Increase factors were determined by assuming that the length of time between last exposure and the date the claim is reported to the carrier is exponentially distributed if there is no "closed" statute of limitations. This exponential distribution provides for more claims emerging within the first year after last exposure with successively fewer claims emerging in each year thereafter. This is intuitively appealing in two respects. First, one can argue that in many cases the onset of the disease causes the last exposure. Hence, we would like our distribution to show a concentration of claims emerging on or shortly after the last exposure. Second, the more time which expires after last exposure, the greater the probability the claimant may die from unrelated causes prior to contracting the disease. Therefore, we would like our distribution to show fewer claims in each year after last exposure. For states in the National Council's Detailed Claim Information (DCI) data base without "closed" statutes of limitations, an average time between last exposure and the date the claim was reported was computed. This average was calculated separately for each disease and serves as the unbiased maximum likelihood estimator for the parameter of the assumed exponential distribution. Since the parameter of the exponential distribution results from observed claims, the probability that there will be fewer claims long after last exposure due to unrelated deaths is reflected. Therefore, mortality considerations are implicit in the model chosen. The actual and exponential distributions are compared for each disease in Figure 1.

Knowing the parameter of the exponential distribution, it is possible to determine the percentage of total claims for each disease emerging in each year after last injurious exposure. If benefits are based on last exposure, a relative cost for each claim is determined by discounting the future cost of that claim by 3.5 percent for each year after last exposure.

Benefit Level Between Last Exposure and Manifestation

If benefits are based on wages at the time the disease becomes manifested, the relative cost for each claim increases by 6 percent per year for the number of years between last exposure and manifestation to represent wage growth. The same 3.5 percent discount factor is used for these cases. These 3.5 percent interest and 6 percent wage growth rates are recommended by the National Council's Actuarial Committee for the pricing of law changes. Knowing the relative magnitude of each claim and the year in which the claim will emerge, the total relative cost can be computed under a specific statute of limitations after last exposure using the appropriate wage. Comparing this relative cost to the total relative cost with no limitation and using the wage at the time of manifestation determines the increase factor mentioned above for each disease.

Distribution of Diseases By Occupational Classification

After the increase factors have been determined, it is necessary to determine the amount of losses in each state for each disease where a pricing is desired. To accomplish this, data was again used from the Detail Claim Information file. Each claim in the Detail Claim Information file was converted by the application of the appropriate increase factor to a not "closed" statute of limitations and wage at manifestation basis. The appropriate factor, of course, depends upon the disease coded for the claim, and the state of jurisdiction for the payment of benefits. An increase factor of unity was used for claims other than occupational disease and for all claims in jurisdictions where benefits are currently based on the wage at manifestation without "closed" statutes of limitations.

After this conversion, all losses are at the levels they would be if benefits were based on the wage at manifestation and if the time limitation from last exposure was removed. Total losses were computed for each disease (including no diseases) within each class code. Since the DCI sampling ratio is chosen to generate a constant number of permanent partial claims, each state* receives approximately the same weight in the overall totals. However, the proportion of disease losses within each class code for each state is weighted by the contribution of that state's class losses to the total class losses. This prevents any particular state's high or low proportion of disease within a class due to small overall losses or too few claims from materially affecting the overall distribution of disease within that class.

* Pennsylvania was excluded because data is not reported using NCCI classification codes.

Cost of Proposal By Classification for Each State

The total of the disease losses within each class is then converted, by the inverse of the appropriate increase factor, to the statute of limitations and time of wage for the calculation of benefits applicable in each state. For each state where a pricing is needed, totals are then calculated for each disease within each class. For each state, then, we can calculate the proportion of any particular class's losses due to a specific disease. These percentages are then applied to each state's Unit Statistical Plan losses for each classification to determine the amount of losses for each disease. Since detail claim contains only compensable claims, the medical only component of the Unit Statistical Plan losses was excluded to calculate the disease losses within each class. These medical only claims enter into the totals as other than occupational disease losses. If there is a classification with losses under the Unit Statistical Plan, and there are no matching losses for that class code in the detail claim, all losses for that class are excluded.

Review

The steps to determine each state's occupational disease losses are as follows:

i) Convert all DCI losses to a wage at manifestation and no time limit from last exposure basis. Sum these by class and disease.

ii) Convert these totals to the level which would prevail under the laws of each state where a pricing is desired. For each state, determine the percentage of each occupational disease to total losses separately for each class code.

iii) Apply these percentages to the non-medical only Unit Statistical Plan losses in each state for each class. Medical only losses are assumed to be nonoccupational disease.

This procedure produces estimates of disease losses for each classification within each state. Applying the increase factors produces estimates of proposed disease losses within each class in each state if benefits were based on the wage at manifestation and if the time limitation from last exposure were removed.

Summing these present and proposed losses for each state and each disease over all classes produces the average overall effect and the average effect for each disease (Table 5).

Statewide Average Effect

Summing the present and proposed losses for each state and each class over all diseases produces the same average overall effect and the average effect by classification (Table 4). The classifications with losses under the Unit Statistical Plan and no matching losses for that class code in the detail claim are assumed to be affected the same as the statewide totals.

ADDITIONAL INFORMATION

Any questions, regarding this report should be directed by mail or telephone to:

Clifford Wess	212-560-1055
Charles Gruber	212-560-1058

TABLE 1

States with "Closed" Statutes of Limitations

1. Alabama - 1 year from last exposure. (Sec. 25-5-147)

2. Arkansas - 3 years after last exposure. (Sec. 81-1314)

3. Georgia - 3 years after last exposure for disability, 7 years - where death follows continuous disability which commenced within 3 years of last exposure. (Sec. 114-801)

4. Idaho - 1 year from last exposure. (Sec. 72-439)

5. Illinois - 3 years from last exposure - asbestosis, 25 years from last exposure. (Sec. 172-36f)

6. Indiana - disablement must occur within 2 years of last exposure. Claimant has 2 years from disablement or death to file claim. (Sec. 22-3-7-32, 22-3-7-9 and 10).

7. Iowa - 1 year after last exposure for disability, 7 years after death following continuous disability. (Sec. 85A.12, .16 and .18)

8. Kentucky - 3 years from last exposure or first manifestation - maximum 5 years after last exposure. (342.316(3))

9. Maine - 3 years from last injurious exposure. (39-189) except for asbestos (no limitation).

10. Montana - 3 years from the last day upon which the employee worked for the employer against whom compensation is claimed. (Sec. 39-72-403)

11. New Mexico - 2 years from last exposure. (Sec. 59-11-10)

12. North Carolina - 2 years from last exposure. (Sec. 97-58)

13. Oregon - 5 years from last exposure. (Sec. 656.807)

14. Vermont - disability: 5 years from last exposure; death: 12 years from last exposure following 5 years of disability. (Sec. 21-1006)

15. Virginia - the earlier of: 5 years after last exposure or 2 years after diagnosis (Sec. 65-1-52), except asbestos 2 years from diagnosis.

16. Wyoming - earlier of 1 year after diagnosis or 3 years after last exposure. (Sec. 27-12-503 (b))

NATIONAL COUNCIL ON COMPENSATION INSURANCE

TABLE 2

States Where Benefits Are Based On Wage At Last Exposure

1. Alabama
2. Arkansas
3. Georgia
4. Illinois
5. Indiana
6. Kansas
7. Kentucky
8. Louisiana
9. Michigan
10. Missouri
11. New Jersey
12. South Dakota
13. Wisconsin
14. Wyoming

TABLE 3

INCREASE IN OVERALL COST BY STATE

(1) STATE	(2) STATUTE OF LIMITATIONS*** IN YEARS	(3) BASIS FOR WEEKLY BENEFIT+	(4) CURRENT PCT. OF LOSSES FROM O.D.++	(5) PCT. INCREASE IN O.D. COST	(6) PCT. INCREASE IN OVERALL COST
Alabama	1	LE	1.27%	236%	3.0%
Arkansas	3	LE	1.33	60	.8
Georgia	3	LE	1.11	72	.8
Idaho	1	MN	.71	239	1.7
Illinois	3*	LE	1.80	56	1.0
Indiana	2	LE	1.35	104	1.4
Iowa	1	MN	.74	203	1.5
Kansas	-	LE	1.70	18	.3
Kentucky	5	LE	6.80	43	2.9
Louisiana	-	LE	1.76	17	.3
Maine	3**	MN	1.29	31	.4
Michigan	-	LE	2.38	17	.4
Missouri	-	LE	2.16	19	.4
Montana	3	MN	1.72	64	1.1
New Mexico	2	MN	1.82	121	2.2
North Carolina	2	MN	1.13	88	1.0
Oregon	5	MN	1.40	29	.4
South Dakota	-	LE	1.49	20	.3
Vermont	5	MN	1.32	30	.4
Virginia	5**	MN	1.85	16	.3
Wisconsin	-	LE	2.16	19	.4

* 25 year limit for Asbestosis

** Unlimited for Asbestosis

*** From date of last exposure

+ LE = wage at last exposure
MN = wage at manifestation

++ All figures are estimated - see discussion of "method" for details - numbers may differ from actual DCI figures.

TABLE 3.5

Number of Claims	Disease	Average Latency Period (Years)*	Average Time Between Last Exposure and Date Reported(Years)**
137	Dust Diseases	16	2.7
137	Asbestosis	24	9.2
160	Black Lung	28	2.8
0	Byssinosis+	11	2.2
70	Silicosis	23	3.4
790	Other Respiratory	11	2.2
109	Poisoning - Chemical	3	0.6
37	Poisoning - Metal	4	1.8
3	Radiation	0	2.8
448	Other Occupational Disease	10	2.0
34	Cancer	19	2.7
626	Dermatitis	1	0.4

+ No actual data - assumed the same as "Other Respiratory".

* Detail claim states with "open" statutes of limitations. Average age at the time reported for disease minus average age at the time reported for all claims.

** Detail claim states with "open" statutes of limitations. Average of "Report Date" minus "Injury Date".

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                          NATIONAL COUNCIL ON COMPENSATION INSURANCE          2:58 SATURDAY, MARCH 31, 1984

                                               TABLE 5

                    IMPACT OF REMOVING STATUTE OF LIMIT - WAGES AT MANIFESTATION

------------------------------------------- JURST=ALABAMA -------------------------------------------------------

   OBS    DESCRIPT                  PRESWGHT     PRESCOST       EFFECT     PROPCOST     PROPWGHT

    1     TOTAL ALL INJURIES         100.00     170164132       1.0301    175287566      100.00
    2     OTHER INJURIES              98.73     168003429       1.0000    168003429       95.84
    3     DUST DISEASES                0.07        127385       3.5405       451011        0.26
    4     ASBESTOSIS                   0.02         34793      14.5268       505431        0.29
    5     BLACK LUNG                   0.53        896289       3.5645      3284440        1.87
    6     BYSSINOSIS                   0.02         38746       2.9380       113836        0.07
    7     SILICOSIS                    0.11        184058       4.4329       815904        0.47
    8     OTHER RESPIRATORY            0.21        353402       2.9380      1038283        0.59
    9     POISONING-CHEMICAL           0.03         57808       1.2442        71926        0.04
   10     POISONING-METAL              0.00          5018       2.4768        12429        0.01
   11     RADIATION                    0.00             7       3.6645           25        0.00
   12     OTHER OD                     0.12        206416       2.7050       558359        0.32
   13     CANCER                       0.04         62015       3.5405       219566        0.13
   14     DERMATITIS                   0.11        194765       1.0933       212928        0.12
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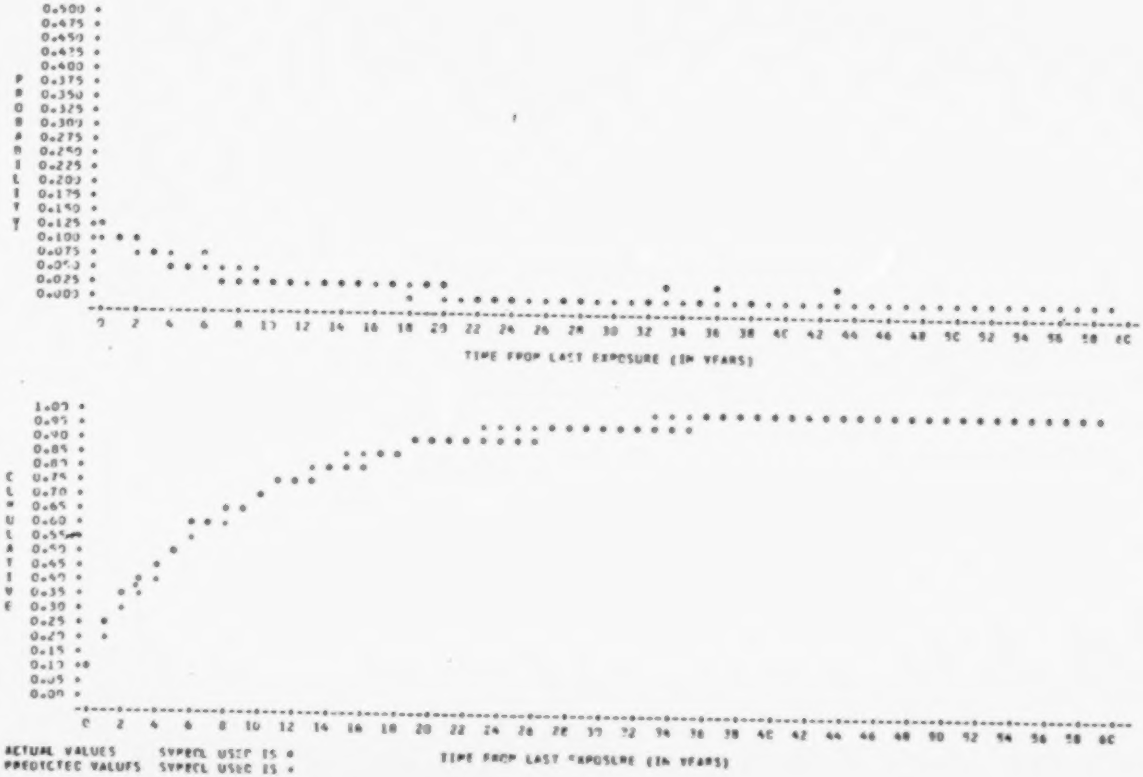
NATIONAL COUNCIL ON COMPENSATION INSURANCE

FIGURE I-9

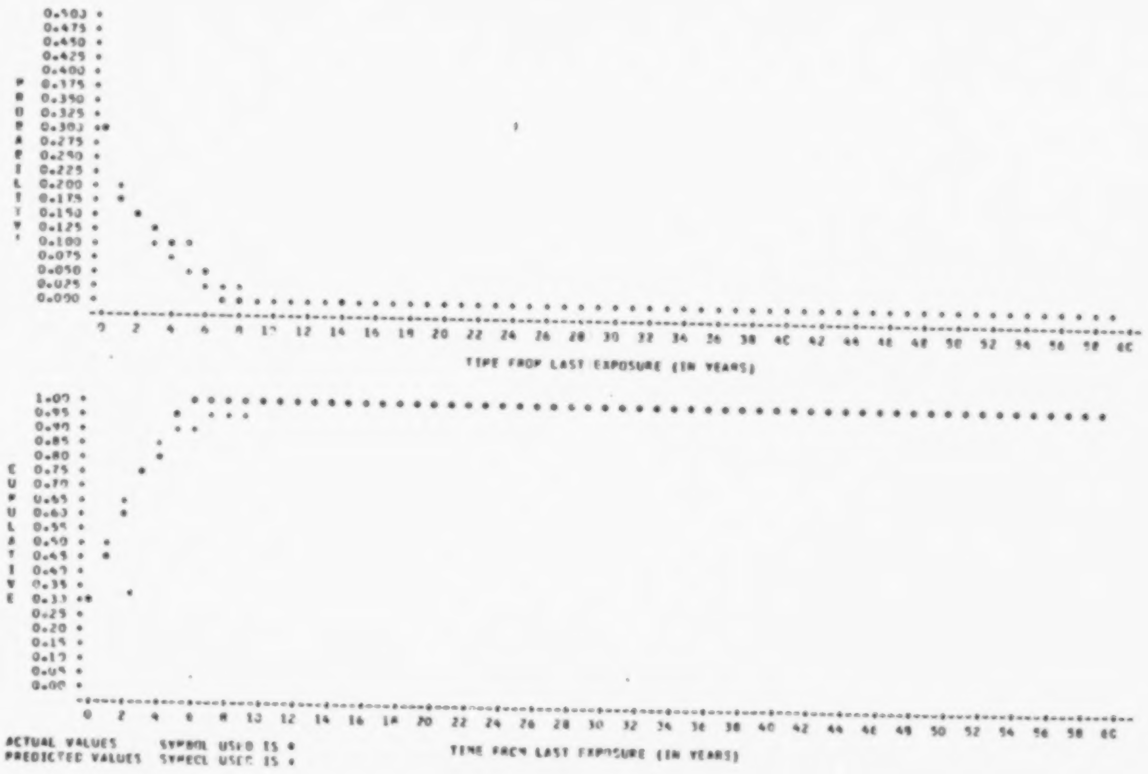
PROBABILITY OF MANIFESTATION VS. TIME FROM LAST EXPOSURE
ACTUAL AND PREDICTED VALUES
ASBESTOSIS



NATIONAL COUNCIL ON COMPENSATION INSURANCE

FIGURE I-C

PROBABILITY OF MANIFESTATION VS. TIME FROM LAST EXPOSURE
ACTUAL AND PREDICTED VALUES
BLACK LUNG



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Kevin M. Ryan
President

May 9, 1984

Hon. Don Nickles
Chairman
Subcommittee on Labor
United States Senate
Washington, D.C. 20510

Dear Senator Nickles:

I would like to thank you again for the opportunity to appear before the Labor Subcommittee on April 30.

During my presentation and subsequent answers to your questions, I may have created an erroneous impression. After further investigation and review, clarification is necessary.

I referred to the process by which state workers' compensation laws are constantly being upgraded and about my organization's participation in the process through actuarial analysis of proposed and enacted legislation. While it is true that state legislatures are quite active and that NCCI plays an important role, my example stating that last year "approximately 1,000 state laws were enacted affecting workers' compensation" was in error.

The 1,000 estimate refers to the total number of bills affecting workers' compensation that received some legislative action, but not enactment in all cases. We have recorded 1,438 separate bills introduced into the various state senates and state houses of representatives. Recognizing that many of the senate and house versions of introduced bills are similar and that we have been called upon to cost evaluate many proposals not yet formally introduced by legislators, we felt a fair estimate of the total number of unique legislative bills is 1,000. Of these, 254 ultimately became law in 1983.

Your question on this matter at the hearing caused us to analyze this matter in more detail. I hope this clarification is of assistance. If we can be of further aid, please feel free to call on us.

Sincerely,

President

KMR/lb

Senator NICKLES. Mr. Ryan, thank you for your comments.

You indicated that the State workers' compensation system is working for asbestos-related occupational disease.

In your opinion, why are so many claimants bypassing it?

Mr. RYAN. I think the economic attractiveness to both the claimant and his attorney, for the tort system, makes the workers' compensation system underutilized, I mean, it stands there ready, but there are more attractive monetary alternatives.

Senator NICKLES. It is working in that regard, but there are also a large number of claimants who could not go through workers' comp, is that not correct?

Mr. RYAN. That is correct. There are some who are seeking tort remedies who would not be subject to workers' compensation, and would not receive benefits under the workers' compensation system. There are many who would receive benefits under workers compensation system, but they have not availed themselves of the system, because of the attractiveness of the alternative, which is the tort system.

Senator NICKLES. Mr. Ryan, in your opinion, why are disease claims on the average more than twice as costly as traumatic claims that arise from a single injury?

Mr. RYAN. It is the type of injury. When you look at traumatic claims, there are all types, temporary totals and medical only cases.

When you talk about occupational disease, you are talking about more permanent injuries and death cases, so that the average value is greater.

Senator NICKLES. Can you account for why there are so many clerical employees filing for asbestos claims?

Mr. RYAN. The exposure to asbestos, as the testimony has shown, is quite prevalent. If you look, there are some studies that show that even an exposure of the worker's family to asbestos creates an asbestos is disease. It is not hard to imagine clerical people who are at the worksite, receiving some exposure to asbestos, and asbestos-related diseases.

Senator NICKLES. And you think possibly a large number of occupational disease claims are filed more under the guise of seeking compensation without having merit?

Mr. RYAN. I am not sure I understand the question, but there are——

Senator NICKLES. Occupational disease, in many cases, is not as easy to define as a traumatic injury. Do you feel like there is a greater instance of abuse in this area?

Mr. RYAN. Well, I think—I do not think there is a great deal of abuse, with 68 percent of the contested claims receiving some type of payment under the workers' compensation system, I think that speaks to the fact that the majority of cases, the overwhelming majority of cases, even those that are contested, are valid claims and they receive payment under the workers' compensation statutes.

I think the explanation given earlier, that even the high percentage of cases that are contested, are more a result of the investigation process that is necessary in handling a disease claim, rather than any refusal to pay valid claims.

Senator NICKLES. You also state that the average workers' comp, lost-time benefit was $16,900. Is most of this for asbestosis claims, as opposed to one of the answers?

Mr. RYAN. No, these are all asbestos-related occupational disease claims, and they only amount to 7 percent of the occupational disease claim.

Senator NICKLES. Was $16,900 the average benefit of all workers' comp, or occupational disease?

Mr. RYAN. That was asbestos claimants that received a workers' compensation. They averaged $16,900 for lost time benefits.

Senator NICKLES. Does that include the cancers?

Mr. RYAN. Yes, all asbestos-related diseases.

Senator NICKLES. Strictly from workers' compensation?

Mr. RYAN. Yes.

Senator NICKLES. We have heard testimony that some of the cancers, and asbestosis, are receiving figures that were in the six figures, as well, through the tort system.

Mr. RYAN. Through the tort system, right. But these are in the workers' compensation system which is primarily geared to replace lost wages and pay medical benefits. The 16,900 is just for lost time benefits.

Senator NICKLES. Do you have any data on whether or not the State workers' comp programs could effectively handle all the asbestos claims now filed in the courts?

Mr. RYAN. The problem with trying to estimate what the impact of those cases are, as they relate to workers' compensation, requires a great many assumptions about whether or not they really are compensable under workers' compensation.

The workers' compensation system is basically different in that you are not talking about the size of the remedies that are being sought in tort, because workers' compensation pays lost wages and medical benefits, primarily.

Senator NICKLES. You think as far as their normal forum, under workers' comp, they could be accommodated?

Mr. RYAN. I would say that a normal transition from the tort system of those cases that are now pending into workers' compensation could be handled.

I say that based on the fact that we are talking about the workers' compensation system as a $20 billion economic cost; that is, $20 billion of insured workers' compensation.

Ten years ago it was less than half of that, so that in 10 years, the system has withstood a doubling of cost. As for these pending cases that are now in the tort system, if they were transferred to the workers' compensation system while doing it on a basis that maintains the workers' compensation principles, the system could withstand that kind of monetary jolt.

Senator NICKLES. Not just monetary, what about litigation, in just the massive load of cases?

Mr. RYAN. Well, again I do not——

Senator NICKLES. Particularly if it is concentrated in just a few States, and we heard testimony that a lot of it would be concentrated in some of the coastal States?

Mr. RYAN. The administrative problems, I really cannot address. I do not know what the answer to that is.

I can speak to whether or not the costs are prohibitive, and I would say that the system could withstand that kind of jolt.

Senator **Nickles**. You did a lot of homework, and I appreciate the table you supplied to the Committee, which shows the State laws.

You also mentioned that approximately 1,000 State laws were enacted, in the last year that affected workers' compensation.

Mr. **Ryan**. Yes.

Senator **Nickles**. One thousand State laws?

Mr. **Ryan**. Yes.

Senator **Nickles**. How could that be?

Mr. **Ryan**. They vary from minor adjustments to some fairly significant changes.

Senator **Nickles**. That would be 20 statutory changes in each State. That would not be very probable to me. It does not seem to me it would be that high.

Mr. **Ryan**. We price over 3,000 proposals a year, and they extend from minor changes to significant ones. But a great deal of them are just minor changes to the law.

Senator **Nickles**. It would actually be that many?

Mr. **Ryan**. Yes.

Senator **Nickles**. Mr. Ryan, thank you very much for your comments before this committee. We appreciate your interest, and also your expertise in the work that you have done.

Our final witness is Edward Woodward, assistant general manager from San Francisco, representing the California Workers' Compensation Institute.

Mr. Woodward, welcome. We appreciate your appearance, and the fact that you traveled so far to assist this committee today.

STATEMENT OF EDWARD C. WOODWARD, ASSISTANT GENERAL MANAGER, CALIFORNIA WORKERS' COMPENSATION INSTITUTE, SAN FRANCISCO, CA

Mr. **Woodward**. Thank you. It is a pleasure to be here, Mr. Chairman.

My name is Edward Woodward. I am assistant general manager for the California Workers' Compensation Institute, a San Francisco based nonprofit research corporation, whose member insurers write and service about 95 percent of statewide workers' compensation premiums.

Prior to joining the institute, I served as the Assistant Deputy Commissioner for the U.S. Department of Labor, with responsibility for administering workers compensation claims for Federal employees in California, Arizona, and Nevada, under the Federal Employees Compensation Act.

My remarks today, I would like to summarize the results of two efforts: one State, one Federal, to provide a prompt and effective workers compensation remedy for workers exposed to asbestos.

The two efforts were initiated about concurrently, in terms of time, but they were independent. They were, however, based, I think, on some common perceptions of deficiencies in the workers compensation system related to asbestos.

First of these assumption was that there are, in large number, a significant population of workers who were exposed to asbestos, and were suffering impairment, disability or death from this exposure.

The second assumption or perception, was that the antiquated statutes, regulations, and inefficient administration, often under the workers' compensation, was resulting in long delays, or in many case denials of workers compensation benefits to otherwise qualified applicants.

The third perception, going into these efforts, was that these problems inherent in the workers' compensation system were forcing employees to seek recovery under the tort liability system, rather than to utilize the workers compensation arena.

In California, despite relatively low incidents of occupational disease claims, and asbestos, there was a lot of concern, a lot of attention provided to these claims, because they were engendering a great deal of dispute. They were often long, lengthy disputes, not over the issue of compensability, but over the issue of trying to determine which of a number of employers were liable, or sometimes on coverage issues.

These claims, because they did get so much attention, resulted in 1979, in the State legislature, creating a $2.6 revolving fund to provide temporary total disability and medical benefits to asbestos-exposed workers, while the State adjudicatory agency was determining the issues of liability of employers and coverage issues under their claim.

The fund, known as the asbestos workers account, began operation January 1, 1981. On November 20, 1981, the Legislature convened an oversight hearing to determine the effectiveness of the fund in meeting its intended goal.

According to testimony provided at that hearing, the fund had identified 498 potential claimants that could seek aid through the fund. However, only 12 qualified applicants had actually tried to seek benefits from the fund.

Of these 12, only 10 had actually been paid workers compensation benefits, for a total amount of $19,500. Perhaps more disturbing, the annual cost of administering the fund was approximately $125,000. Not a very good cost-benefit ratio.

The reasons given at the testimony for this lack of performance, or seemingly anomalous results were provided primarily by legal representatives of the claimants.

First, that the fund was limited, and that it only provided temporary disability benefits and medical care. They argued that most asbestos victims were in fact either permanently disabled, or deceased. So this limitation that argued precluded many people from seeking benefits, or being qualified for benefits that could be.

The second major reason given was that the fund had a requirement that any applicant must submit to an independent medical examination. This made them reluctant to avail themselves of the services of the fund, because they felt it might negatively impact on current third party litigation, even though the law specifically prohibited this medical evidence to be utilized in civil suits.

The attorneys argued at that point that they were afraid that this evidence would be subpenaed and used at settlement hearings.

In response to this testimony, the legislature amended the law, it provided that the fund should pay for permanent disability, and for death benefits, as well as for temporary disability and medical. It also deleted the requirement that applicants submit to an independent medical examination, as long as they presented adequate medical evidence in submitting their application to the fund.

The results, through December 31, 1983, after those hearings, the fund has accepted 25 additional cases. That is from the end of 1981 through the end of 1983. They now have a grand total of 37 cases accepted, which they have paid benefits which represent $274,000. Of those 37 cases, 18 involve only the payment of medical benefits. Only three of those cases involve the payment of permanent disability, and in only one case were death benefits allowed, and that was—and that case subsequently was established to be a death unrelated to asbestos, on autopsy.

So despite very serious legislative effort to provide benefits, the administration was only able to provide benefits to approximately 12 cases a year, at an approximate cost of $7,000 per case.

Before examining some of the possible reasons for these results, I think it may be helpful to look at the other effort, comparable effort that was carried out under the FECA Program in San Francisco.

In the late seventies, the Department of the Navy initiated a massive screening program to identify the existence and extent of asbestos related disease among shipyard workers. The results of this screening were disturbing.

For example, on initial screening, 30 percent of the Long Beach Naval Shipyard workers were found to have abnormalities consistent with asbestos exposure. These results, along with a lot of attendant publicity about asbestos hazards that were taking place at that time, created an influx of claims, more than 2,000, from shipyard workers in California, to the San Francisco office of FECA.

It should be pointed out that under FECA, in occupational disease claims, the burden of proof is actually on the employee. He must prove, through substantial probative evidence, that he has in fact gotten the disease because of his exposure in the workplace, which must be documented, and that any resulting impairment or disability was proximately caused by his employment.

The employee's burden to obtain documentation of exposure of medical histories, and of occupational histories, dating back 20 and 30 years, along with the requirement that they will have to submit sophisticated and expensive medical evidence, establishing the existence of disease and impairment was a virtually impossible burden, it was felt. It was perceived that this alone would preclude most of claimants from ever being able to effectively take advantage of the benefits under the act.

In response to this, an administrative determination was made to abandon the burden of proof on employees, and instead the Federal Government would adopt and assume the responsibility to obtain the evidence, and particularly the medical evidence, to be able to properly resolve and adjudicate the claim.

To implement this decision, a special program was established, in conjunction and concurrence with medical experts, pulmonary experts from some university affiliated medical hospitals and clinics.

The program was structured in such a way that once a claim was filed with FECA, the claimant would be automatically referred to one of these designated hospitals or centers. They would be provided an evaluative examination conducted according to a common protocol that all the centers had, that was provided by FECA, and it would include the general physical examination, a complete occupational and medical history submitted by the claimant when he filled out a questionnaire.

In addition, he was given an extensive testing—that included chest x rays, that were interpreted by Board certified radiologists, pulmonary function studies, carbon monoxide diffusion, and arterial gas studies, and some others that I am sure that you have heard more than you care to, in your last hearing.

All of these reports and test results, along with the physician's diagnosis and recommendations for future treatment were then sent to, and reviewed by another independent medical pulmonary expert, to insure that consistency and quality among the centers, if medical efforts discovered any impairment, disability, or death attributable to asbestos exposure in Federal civilian employment, the claim was accepted, and benefit paid.

The program did not recognize apportionment, either to other conditions or to other employments. All mesothelioma and lung cancers, and brocogenic cancers were virtually accepted.

A provision was made to provide scheduled awards, for example, to be able to pay on a limited impairment basis a medical impairment to the lungs. In other words, every effort was made to construct a system designed to pay, not to reject these cases.

I might mention that additionally, where the employee agency did not corroborate employment data, exposure history, the claimant's questionnaire was accepted as factual.

In the results of this program, there was no evidence of the existence of asbestos related disease in 30 percent of the cases, and no benefits were provided. In another 57 percent of the cases, they were entitled only to medical benefits, primarily annual medical surveillance.

Virtually all of these claimants showed physical evidence of asbestos related disease, or at least findings consistent with exposure to asbestos. For example, plural plaques, plural thickening, but they had no impairment, or no disability due to any asbestos related exposure.

Senator NICKLES. You said 30 percent received nothing. Out of the 70 percent, what percent of those actually received nothing beyond?

Mr. WOODWARD. OK. An additional 57 percent received only medical benefits, medical surveillance. An additional 13 percent, or the final 13 percent, received some form of compensation benefits.

Senator NICKLES. And that was strictly under FECA?

Mr. WOODWARD. That was under FECA.

Senator NICKLES. And that was done in what years?

Mr. WOODWARD. That was done in 1979 through November 1981.

Senator NICKLES. Did that survey include only those workers who were still employees of the Federal Government?

Mr. WOODWARD. No; no, anybody that submitted a claim, that had Federal civilian exposure, claiming Federal civilian exposure. Some were retired.

Senator NICKLES. If they worked for the Government previously, you brought those in under that time period?

Mr. WOODWARD. That is correct.

Senator NICKLES. Is that review in process; is that ongoing or not?

Mr. WOODWARD. The program, as established, I understand, is still operating that way in San Francisco. I understand it may have been adopted around the country, but I would have to check with FECA to find that out.

Senator NICKLES. Is the State program still——

Mr. WOODWARD. Yes.

Senator NICKLES. It is still going?

Mr. WOODWARD. Yes; the State program is still in operation, and there the results that I gave you were through the end of 1983.

Senator NICKLES. Through the end of 1983, and they have added about 12 per year, is that correct?

Mr. WOODWARD. Yes.

Senator NICKLES. I would think that the legislature, Governor, and administration would be displeased with the results of that program.

Is it anticipated that it would be continued, be discontinued, or modified?

Mr. WOODWARD. Well, I do not really know. I think I do know the author is disappointed. I will not say displeased with the program, but he is disappointed with what has happened.

Senator NICKLES. What would be your assessment now? You mentioned previously, and they modified its initial scope, your basic comment on why the participation is not higher now, after those modifications?

Mr. WOODWARD. I think the assumptions under which the act was created, that there were a large number of people who, in fact, had impairments and disabilities, and were in immediate need of benefits was wrong. That does not seem to be the case.

Additionally, as it turned out, I think the attorneys were saying, correctly, I think, they are reluctant to have their clients submit to the kind of examination that is required, and the kind of evidence required, before they have developed third-party litigation.

Once they do, I do not think that the rest, and the normal processing under the workers' compensation system is that slow, or that burdensome, that they would not just as soon go through that.

Senator NICKLES. You indicated that both State and Federal efforts to improve workers' comp were based on certain perceptions.

I would like for you to tell this committee your present thoughts on a couple of these perceptions.

One, that there is a significant population of workers suffering impairment, disability or death due to asbestos.

Mr. WOODWARD. Yes; I think that should be modified, to say that there is a significant population of workers who were exposed to asbestos.

There is also a significant population, or percentage of these people, who have some evidence of disease, radiological changes, primarily. However, I think it is rare that these people suffer impairment or disability due to this disease.

I think also I would recommend there was a very good study done by Dr. Spivey, formerly of UCLA, on 83[illegible] Long Beach Naval Shipyard workers, and his findings and conclusions I think are rather interesting and somewhat dramatic in supporting this premise.

Senator NICKLES. How about your comment on this perception, that workers' compensation benefits are being delayed or denied to asbestos exposed workers because of statutes, regulation, or administration?

Mr. WOODWARD. Well, it turned out that I can speak for California first. The perception was that these liability determinations were in fact delaying these things unduly. If that were the case, I am sure that these people would have applied for benefits under the account, and would have been able to receive them.

Some of the procedures in the administration have proved to be difficult to deal with asbestos. But the Appeals Board, and the courts, very easily, through some creative logic, simply have been able to move around these, at least in California we had very little problems dealing with asbestos cases, for example.

Senator NICKLES. You mentioned primarily California. What is your opinion, nationwide?

Mr. WOODWARD. I think I would have to defer you to your nationwide panelists here. I am not that familiar with their States.

Senator NICKLES. Comments on this perception, that the problems inherent in workers' compensation programs are forcing workers to seek recovery under tort liability.

Mr. WOODWARD. As one-third of the Long Beach Naval Shipyard workers, who in the screening were identified to have some type of x-ray abnormality consistent with asbestos, never filed workers' compensation, or FECA benefits. They instead went through tort.

Of those who did file, virtually all of them had already initiated their third party litigation. Under the California system, virtually every asbestos claimant is represented before he files his workers' compensation claim.

So it turns out this is not driving them to tort. In fact, they are choosing tort rather than pursuing their claim through workers' compensation initially, is my impression.

Senator NICKLES. California is one of the States that has been mentioned where major portion of asbestos tort suits are being filed.

Based on your studies in California, do you think we have a national asbestos related occupational disease crisis?

Mr. WOODWARD. According to the Rand study, 29 percent of the asbestos litigation, I guess, has been filed in products liability suits in California.

When you consider that according to that same study, 51 percent of the pending 16,000 suits nationwide, involve shipyard workers, and when you look at the results under FECA, I would say that the perspective of the crisis is from a disability, or impairment viewpoint, not the same as it is from a tort litigation standpoint.

In other words, the problem seems to be not one of the tremendous volume of disabled, impaired people, but that the tort system is using a different standard by which to compensate these people. There it seems to me that if you are a claimant, and you can show that you have been exposed to asbestos, you can provide evidence that you have in fact the disease.

You may have, in a potential for disability, you may have a case under the tort. I would leave that to others who are more experienced.

But in addition to that, under workers' comp, you have to have an actual impairment or disability that has resulted, and what we have found is that very few of them do.

[The prepared statement of Mr. Woodward follows:]

REMARKS OF EDWARD C. WOODWARD, ASSISTANT GENERAL MANAGER, CALIFORNIA WORKERS' COMPENSATION INSTITUTE, BEFORE THE U.S. SENATE SUBCOMMITTEE ON LABOR,

April 30, 1984

My name is Ed Woodward. I am the assistant general manager of the California Workers' Compensation Institute, a San Francisco-based non-profit research organization whose member-insurers write and service about 95 per cent of statewide workers' compensation premiums. Prior to joining the Institute, I served as Assistant Deputy Commissioner of the U.S. Department of Labor with responsibility for administering workers' compensation claims of federal employees in California, Arizona and Nevada under the Federal Employees Compensation Act.

My remarks today will summarize the results of two efforts - one state, the other federal - to provide a prompt and effective workers' compensation remedy for workers exposed to asbestos. Both efforts at improving workers' compensation programs were constructed on the following perceptions. First, there was a significant population of workers suffering impairment, disability or death due to asbestos. Second, workers' compensation benefits were being delayed or denied to asbestos-exposed workers -- suposedly because of anachronistic statutes, burdensome regulations and ineffective administration. Third, the problems inherent in the workers' compensation programs were forcing workers to seek recovery under tort liability.

The results of these efforts to correct perceived workers' compensation deficiencies provide an opportunity to evaluate the validity of the assumptions, offer a perspective on the nature and scope of the so-called "asbestos crisis" and may be instructive in providing an insight into the relationship between workers' compensation and the tort system.

Occupational disease claims are a relatively small part of workers' compensation. For example, occupational diseases accounted for only 5 per cent of all "disabling" injuries, i.e., one or more days lost time, in 1980, according to the California Division of Labor Statistics and Research. Put another way, only one of every 1,000 fulltime employees covered by the California workers' compensation law were affected by a disabling occupational illness in 1981.

These statistics are consistent with results of a pertinent Institute study that limited the definition of occupational disease to disorders attributable to job-related inhalation, absorption, ingestion or contact with a toxic substance. On that basis, occupational disease claims in the first quarter of 1981 accounted for only 1.6 per cent of all disabling injuries. And only one in six of that number, or 0.26 per cent of all claims, involved asbestos exposure.

However, even with this low incidence, the resolution of claims for workers affected by asbestos-related conditions was time consuming. Lengthy disputes were frequently the case -- not over existence of the disorder but, rather, attempting to determine which of several employers were liable. So in 1979 the California Legislature created a $2.6 million revolving account to provide temporary disability and medical benefits to asbestos victims while the state adjudicatory agency was determining liability.

The Account began operation January 1, 1981. On November 20, 1981 the legislature held oversight hearings. Testimony at the hearing documented that after almost one year of operation the program had identified 498 potential claimants for aid from the fund. However, there were only 12 qualified applicants, of which 10 had been paid a total of $19,500. Additionally, the annual cost to administer the fund was $125,000.

According to testimony at the hearings, the road blocks to more widespread utilization of the fund were its limitation to temporary disability and medical benefits. Counsel for potential recipients argued most victims of asbestos were not "temporarily disabled". Further, claimants attorneys contended the requirement that the applicant submit to an independent medical examination made them reluctant to avail themselves of the fund because the medical reports would impact concurrent third-party litigation negatively -- even though the law prohibited these reports from being used as evidence in a civil suit. Nevertheless, these attorneys testified they feared the reports would be subpoened at settlement hearings.

In response to these hearings the legislature amended the law to provide that the account would pay for permanent total disability and death benefits as well as temporary disability and medical benefits. The legislation also deleted the requirement for an independent medical examination if "adequate" medical evidence was presented.

The results of the program from January 1, 1981 thru December 31, 1983 - a three year period - are as follows.

. A grand total of 37 cases have been accepted and benefits provided at a cost of $274,000.

. Half the cases accepted were for medical benefits only.

. Only three cases involved payment of permanent disability benefits.

. Only one death claim was allowed (which subsequently was established by autopsy to be unrealted to asbestos).

Despite these legislative efforts, the program is only accepting twelve cases per year at an average cost of approximately $7,000 per case. Before examining possible reasons for these apparently anomalous results, it may be instructive to examine the comparable experience of the Federal Employees Compensation Program in San Francisco.

In the late 70's the Department of the Navy initiated a program to conduct massive X-ray screenings to determine the existence and extent of asbestos-related disease among shipyard workers. The results of this screening program were disturbing: On initial screening, 30 per cent of Long Beach Naval Shipyard workers showed X-ray abnormalities consistent with asbestos exposure. These findings, coupled with a great deal of attendant publicity about asbestos hazards, resulted in an influx of more than 2,000 claims from shipyard workers in the FECA San Francisco office.

Under FECA the burden of proof is on the employee in occupational disease claims to prove -- "through substantial probitive evidence" -- the existence of disability and that the employment was the proximate cause of the impairment or disability. The employee's difficulty in obtaining documented exposure data, medical histories and employment records for the previous 20-30 years, along with the requirement to provide sophisiticated and expensive medical evidence establishing proximate cause proved a virtually impenetrable barrier for asbestos-exposed shipyard workers.

Consequently, an administrative decision was made to abandon the burden of proof for asbestos claims. Instead the federal government assumed the burden.

To implement this decision, a special program was developed in conjunction with pulmonary experts from university-affiliated hospitals and medical centers for the processing and handling of asbestos claims. The program was structured so that after an asbestos claim was filed with FECA, the claimant was referred to one of the designated medical centers for examination and evaluation.

The evaluation included completion of an extensive questionnaire (based on a common protocol) describing the claimant's occupational and medical history, including a description of the frequency degree and duration of exposure to asbestos. Additionally, the claimant underwent a comprehensive medical examination that included chest x-rays, pulmonary functions studies, electrocardiogram testing, as well as carbon monoxide difusion and arterial gas studies.

All reports and test results along with the physician's diagnosis and recommendations then were reviewed by another independent medical pulmonary specialist to insure consistency and quality. If the medical evidence found any impairment, disability or death due to asbestos exposure in federal employment, the claim was accepted and benefits paid. The program didn't recognize apportionment, either to other employments or other conditions, and all mesothelioma, lung cancers and brocogenic cancers were deemed compensable. Additionally, the questionnaire completed by the claimant, including employment and exposure history to asbestos, was accepted as factual. In short, every effort was made to pay, rather than reject claims.

The results of this program:

- There was no evidence of the existence of asbestos-related disease in 30 per cent of the cases and, accordingly, no benefits were paid.

- 57 per cent of the claimants were entitled only to medical benefits primarily annual medical surveilance. Most of these workers had physical changes consistent with asbestos exposure e.g., pleural thickening, pleural plaques, etc., but there was no impairment or disability related to asbestos esposure.

Of the remaining 13 per cent actually entitled to compensation benefits:

- 2.6 per cent were entitled to total temporary disability payments.
- 9 per cent were entitled to "scheduled" awards, more than half of which rated 20 per cent or less disability.
- Only 1.3 per cent of all cases were disabled enough to qualify for loss of earning capacity benefits. Yet two-thirds of these determinations rated 0, i.e., no loss of earning capacity dueto the illness.

How does one interpret the results of two serious efforts to provide a prompt and effective workers' compensation remedy to workers exposed to asbestos? The state program has been able to provide workers' compensation benefits to an average of only 12 applicants annually, while the federal program denied compensation benefits to 7 of every 8 claimants. Given the progressiveness of these programs, I am unable to accept the indictment that workers' compensation has "failed". The answer lies elsewhere.

An examination of the experience in asbestos tort litigation may may provide some insight. According to Rand Corporation, the average plantiff's award in asbestos liability litigation is $35,000. Additionally, only 18 per cent of the claims are dismissed or withdrawn, while the vast majority -- more than 3 out of 4 -- are settled. The probability of recovery seems substantially greater under the tort liability system than under even "purposely liberalized" workers' compensation programs.

Almost all claimants under both the state and federal workers' compensation programs also were involved in third-party litigation. In fact, a third of the Long Beach Naval Shipyard workers with X-ray abnormalalities discovered during the screening program never filed for FECA benefits but chose to pursue a tort remedy exclusively. Of those who did file for FECA benefits, most developed their third-party action prior to filing for workers' compensation benefits --to prevent an FECA decision from negatively impacting the third-party action. The identical rationale for not pursuing benefits under the California Asbestos Workers' Account was admitted by attorneys at the legislative oversight hearings.

The reason workers exposed to asbestos can recover under tort liability while not entitled to benefits under workers' compensation programs is not because workers' compensation programs have "failed" or that the tort system is more generous. Rather, the two systems utilize two different standards for compensating victims of asbestos exposure.

While I'll leave the substantiation to those more exper in the tort system -- it seems to provide recovery for potential disability, while workers' compensation requires actual disability. The question becomes one of public policy. To compensate for exposure or disability.

As the experience under FECA demonstrates, the majority of workers exposed to asbestos rarely demonstrate impairment or disability subjected to professional medical standards and objective measures of disability. But many do show evidence of exposure.

Senator **Nickles**. Thank you very much, Mr. Woodward. We appreciate your contribution to this committee, and especially for your traveling so far.

Mr. **Woodward**. Thank you, Mr. Chairman.

Senator **Nickles**. Thank you.

We will adjourn the hearing.

Thank you very much.

[Whereupon, at 11:42 a.m., the subcommittee adjourned.]

OVERSIGHT ON OCCUPATIONAL DISEASE, 1984

MONDAY, MAY 21, 1984

U.S. Senate,
Subcommittee on Labor,
Committee on Labor and Human Resources,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:33 a.m., in room SD-430, Dirksen Senate Office Building, Senator Don Nickles (chairman of the subcommittee) presiding.

Present: Senators Nickles, Randolph, and Riegle.

OPENING STATEMENT OF SENATOR NICKLES

Senator Nickles. Good morning. Today is the Labor Subcommittee's third day of hearings on occupational diseases in general and asbestos-related diseases in particular. Briefly, to date, we have heard from doctors who have described what these asbestos diseases are and from a victims' representative who has described it from a personal perspective. The Rand Corp. and Mr. Fred Baron have detailed who gets what from asbestos litigation.

On the second day, the hearing focused on the interplay between workers' compensation law and products liability law. Various witnesses presented their views on whether or not State workers' compensation laws are functioning to provide benefits to victims of long-latency occupational diseases. A nonbankrupt manufacturer's witness described the problem from his perspective.

Today we will continue to hear from affected parties. The Department of Justice will detail the Government's role and experience with occupational diseases. Manville Corp. will present a chapter 11 manufacturer's perspective, and finally employers whose employees used asbestos products will testify.

Since these hearings have begun, I am pleased that a private sector initiative known as the Wellington group has announced a proposed nonprofit asbestos claims facility. The subcommittee has not been briefed thoroughly enough at this time to comment on the particulars of this proposal, but I do applaud the effort that has gone into this facility.

At the end of today's hearing, the subcommittee will review the testimony that has been presented throughout these hearings. At that time, a decision will be made as to what the next steps should be.

I am particularly pleased to have Senator Randolph, who has had an interest in this and other areas in the labor field for many, many years, join us.

Senator Randolph, do you have opening comments you wish to make?

Senator RANDOLPH. Thank you very much, Mr. Chairman. I am now in my 40th year as a Member of the Congress and I have served on the Labor Committee in both the House and the Senate during all of that time.

These are areas which demand a cooperative approach by both labor and industry.

In our first hearing on this issue, April 24, 1984, we heard testimony from the medical profession and others, addressing the extensiveness of the occupational disease issue, especially focused on the asbestos problem. Our second hearing in the Labor Committee on April 30, was centered on the analysis of current compensation scheme adequacy to victims of occupational diseases. In today's hearing we shall hear from both industry and labor in an effort to further aid this committee in understanding the views and concerns of involved parties to ensure that the American work force remains equitably compensated for their contributions of self for this Nation's prosperity.

Mr. Chairman, I am gratified at the opportunity to be with you this morning and to hear from both industry and labor. It must be an understanding, a cooperative effort, if we are to do the job as it needs to be done to protect those who work in the industries where there is a disease problem that flows from the very action of the worker in connection with the project or program or product that is developed.

Thank you.

Senator NICKLES. Thank you very much, Senator Randolph.

At this point we will insert Senator Riegle's opening statement.

[The statement referred to follows:]

OPENING STATEMENT OF SENATOR RIEGLE

Senator RIEGLE. Thank you, Mr. Chairman. This morning's hearing is the third in a series of hearings focusing on the tragedy of occupational diseases. Several witnesses appearing today represent parties who have taken a keen interest in the problems associated with asbestos exposure in the workplace. This insight into occupationally related diseases should prove invaluable to members of this subcommittee.

Public awareness of the horrors associated with exposure to toxic substances has increased greatly in recent years. News items this month highlight this point. The recent court settlement in the agent orange case quickly comes to mind. Another is the 489-page Federal district court decision in Utah awarding compensation to victims of radiation exposure. Buried behind these headlines stories, however, is a particularly troubling story that appears in the May 7 edition of a national news magazine. That story points to the increasing evidence of toxic exposure and resultant disease in the relatively new semiconductor industry.

This story simply reaffirms the point that workers are exposed to numerous substances in the workplace that may directly endanger their health. While we have several witnesses today who have an intimate knowledge of the asbestos tragedy, I am hopeful that they can enhance our understanding of other occupational diseases as well. If Government, industry, and organized labor can take steps to prevent future asbestos tragedies, society as a whole benefits.

Earlier testimony has indicated that product liability litigation has played a major role in the compensation of victims suffering from asbestos-related diseases. As many of you know, the Commerce Committee has reported out a bill S. 44 that would markedly affect our tort liability law. Enactment of this legislation would also undoubtedly affect occupational disease lawsuits. I look forward to learning our witnesses' views regarding the impact that S. 44 might have on occupational disease compensation and prevention.

As I have stated previously, I pledge to work with the various parties to insure that victims of these diseases will receive fair compensation quickly. Hearings like this one can only aid our understanding of the complex issues associated with occupational disease compensation and prevention. I wish to thank you again, Senator Nickles, for scheduling this series of hearings.

LaDou examining semiconductor worker for lung disease: Only the tip of the iceberg

JAMES D. WILSON—Newsweek

Toxic Trouble in Silicon Valley

They are the gleaming symbols of the postindustrial workplace: the factories of California's Silicon Valley where men and women wearing white gowns work in "clean rooms" making the computer chips of the technological revolution. But too often, it is the well-being of the chip that is being protected—not the health of the worker. Despite its clean, nonpolluting image, the semiconductor business "provides a complete spectrum of occupational hazards . . . including exposures to chemicals, gases [and] metals," writes Dr. Joseph LaDou of the University of California, San Francisco, in the current Technology Review. Even worse, there are growing indications that a few less responsible firms are actually hiding evidence of the hazards.

Industry spokesmen insist they are the victims of a bum rap. Thomas Hinkelman of the Semiconductor Industry Association (SIA) charges that health scares come from "people associated with attempts to unionize the industry," which he claims "ranks among the best" in health and safety. But the criticism is mounting. "We think there is an immense problem and we've managed to expose only the tip of the iceberg," says Gayle Southworth of the Santa Clara Center for Occupational Safety and Health. Finding out how big the iceberg is hasn't been easy. Lawyer Amanda Hawes, who handles workers' compensation cases, obtained records from one company that showed numerous leaks and accidental exposures to dangerous chemicals. Yet the firm did not always tell the workers they had been exposed. In another case, when one patient of occupational-health specialist Dr. Molly Coye of UCSF asked his firm about the amount and kind of chemicals he had been exposed to, he was fired.

There is no question that workers come in contact with enough toxic materials to fill a Love Canal or two. They work with baths of sulfuric acid and nitric acid to clean the thin silicon wafers. They handle solvents and are exposed to "dopants," derived from deadly arsine and phosphine gases, in creating the circuits on the computer chip. A 1980 survey by the California Department of Industrial Relations (CDIR) found that, in the previous year, 42 Silicon Valley companies had used half a million gallons of solvents and 2 million gallons of acids.

Now, with the semiconductor business booming, physicians are seeing much more than acid burns. Coye has treated semiconductor workers with slowed nerve conduction, impaired memory and concentration, and decreased sensation in their fingers. All are symptoms of long-term exposure to solvents. She also sees cases of pulmonary ailments, such as shortness of breath and irritation of the bronchial passages, that result from inhaling acid vapors.

Etching silicon with acid: Guinea pigs?

Long-term effects, which are harder to predict, are even more worrisome. Although a number of solvents are known carcinogens, cancers often take decades to develop. Solvents have also been shown to kill embryos in lab animals, a reproductive hazard that bodes ill for an industry where the majority of factory workers are women. Even industry consultants admit that the effect of chronic exposure to chemicals is a question mark. Donald Lassiter, an SIA consultant, concedes that, for the long term, "there is not enough information to tell what is happening in the workplace."

Handcuffs: In fact, what information does exist may not be reaching the scientists who need it to evaluate the risks. In-plant nurses are seldom trained in toxicology and so do not always spot illnesses from chemicals. In one case, worker Anita Zimmerman, 32, says she was "exposed to chlorine gas every day for over a month" at her job with Advanced Micro Devices, Inc. in Sunnyvale, Calif. An industrial-health clinic told her, after one particularly high exposure forced evacuation of part of the plant, to "gargle with sugar water and take cough syrup," she recalls. Zimmerman now suffers from a form of bronchial asthma that leaves her gasping for breath. In addition, private physicians charge that their industry counterparts do not properly publish reports of occupational disease because the firms "put velvet handcuffs" on them—pressure to maintain the industry's clean image. This suppression of information makes determining which exposure causes which illness a mission impossible.

Recently there also have been signs that industry is changing the rules of the game. Two years ago California officials noticed an abrupt decline in the rate of illness among semiconductor workers, which in 1980 was three times as high as illnesses in general manufacturing. "After the rate dropped we were told anonymously that they were using a different definition of illness," says Karen Jones of the CDIR. What happened was that one-time events like inhalation of arsine gas were no longer being recorded as illnesses even if the worker showed symptoms of chemical exposure. Lassiter, the SIA consultant, argues that the semantics switch did away with "overreporting."

The greatest hope for workers' health may be that, as the industry matures, it will pay more attention to safety. And workers' compensation cases may spur companies to improve protection for employees. Until occupational diseases are investigated fully, however, more workers will become guinea pigs. That may spark a sense of *déjà vu* among veterans of the war for occupational health in other industries. But the fact that workers' health is being threatened in semiconductor factories could prompt second thoughts about embracing Silicon Valley as the model for the postindustrial age.

SHARON BEGLEY with JOHN CAREY

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Senator **Nickles**. Our first guest today is Congressman John Erlenborn of Illinois, who has done a considerable amount of work on this issue.

Congressman, we appreciate your efforts and willingness to appear before the committee. Please proceed.

STATEMENT OF HON. JOHN ERLENBORN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. **Erlenborn**. Thank you, Mr. Chairman. Let me say that I have a rather lengthy statement that I will summarize and hope that the entire statement may be included in the record.

Senator **Nickles**. Your entire statement will be included in the record.

All of the statements will be included in full.

Mr. **Erlenborn**. Thank you, Mr. Chairman, and it is a pleasure to be before this subcommittee today, and in particular to see you and Senator Randolph, with whom I worked back in 1969 in the passage of the Coal Mine Health and Safety Act, including black lung compensation.

I welcome this opportunity to share with you my perspectives of occupational disease compensation and, in particular, the asbestos litigation imbroglio.

Occupational disease compensation presents extremely complex issues and, as recent history proves, Congress should tread carefully in evaluating the nature of the problem and the advisability of any Federal response.

These issues involve the extent of occupational disease, the ability of State workers' compensation laws to accommodate long-latency diseases, the evolution in products liability and its effect on workers' compensation in the asbestos context, and the responsibility of the Federal Government.

The responsiveness of a compensation system can be judged fairly only by agreeing on a benchmark against which determinations can be made. Importantly, therefore, it is necessary to understand the incidence of occupational disease.

There have been innumerable studies, some purporting to show a large universe of occupational disease. These reports, not surprisingly, have received substantial media attention. I am not aware that one has withstood scientific scrutiny.

It is fair to say that no one is certain of the extent of occupational, especially asbestos, disease, although the scientific community has shed considerable doubt on estimates in the higher range.

These doubts, at least as far as asbestos is concerned, are reinforced by testimony before the House Labor Standards Subcommittee and this subcommittee, indicating that relatively few have asbestos disease and even fewer are disabled by the disease.

Yet, belief by some in a virtual epidemic of occupational disease persists because that belief is compatible with either a preexisting anticorporate attitude or a specified political agenda, or both.

The AFL-CIO, for example, has long alleged unabashed support for federalizing workers' compensation, and attests to a high incidence of occupational disease as a means of discrediting State workers' compensation laws.

In evaluating our compensation systems, it is necessary to examine workers' compensation programs both separately in and in conjunction with the tort system. This is particularly so for asbestos diseases.

Although workers' compensation laws and their capacity to accommodate occupational diseases have progressed significantly from a period when occupational diseases were defined in order to exclude them from coverage, they have come under renewed attack, fed by reports of a high incidence of occupational disease and by some remaining shortcomings in a number of States which have encouraged the charge that workers' compensation is unresponsive.

Broad concerns about workers' compensation have also been expressed in attacks on exclusivity, notwithstanding that most have failed, movement toward monopolistic State funds, and proposals to federalize workers, compensation or otherwise supersede it.

About those Federal proposals, I am most familiar, of course, with H.R. 3175, introduced by my colleague, George Miller, and on which the Labor Standards Subcommittee has held hearings.

It federalizes workers' compensation for asbestos diseases and provides criteria for including diseases resulting from exposure to other toxic substances. The bill includes medically unsupportable presumptions and carves out asbestos disease victims for special treatment, so that employees equally disabled from other causes and receiving State workers' compensation would receive disparate benefits. Claims would be processed by the Labor Department's Office of Workers' Compensation Programs, whose performance with black lung, FECA and Longshore has been less than noteworthy.

A recent report by an analyst in the Labor Department estimates that the Miller bill's costs between 1984 and the year 2015 will be from $44 billion to $156 billion.

The Miller bill has other flaws. Its financing mechanism is a so-called insurance pool, to which asbestos producers and their insurers would contribute funds sufficient to finance benefits over the following year based on an annual assessment by the Secretary of Labor.

However, it is not really an insurance pool at all because contributions are not predicated on a defined risk reserved against. It is rather merely a mechanism for taxing insurers and asbestos producers, and passing those revenues along to beneficiaries.

Furthermore, the bill states that asbestos producers can call upon any of their insurers to help meet their annual assessment. But whether and to what extent these insurers are liable to their insureds at all involves underlying insurance coverage issues which are still matters of State contract law.

The upshot could produce this scenario: Insurers refuse to contribute the amounts their insureds think they owe and the issue ends up being litigated. Meanwhile, asbestos producers who are already contributing to indemnify risks for which they have already paid their insurers for years must then contribute even higher amounts to meet the Secretary's assessment. The asbestos producers, unable to afford such massive costs, either go chapter 11 or threaten to do so, while calling on Congress to bail them out.

Neither are Federal efforts to erode workers' compensation limited to workers' compensation bills, per se. Some toxic substance compensation proposals would effectively supersede workers' compensation by permitting employees to recover damages from employers for workplace exposure.

I have dwelled on these Federal proposals, Mr. Chairman, not only to highlight their manifold flaws, but also to caution anyone who still believes the Congress is the fount of wisdom on such issues and that the response to workers' compensation problems is to do nothing or to let the Federal Government step in.

No discussion of occupational disease compensation is complete without reference to the tort system and its relationship to workers' compensation. By now it is beyond peradventure that the asbestos litigation controversy is not the result of a failed workers' compensation system. The workers' compensation system is simply being bypassed by claimants in favor of third-party product liability actions.

The tort system, on the other hand, is perceived as assuring more certain recovery, even though the plaintiff is neither disabled, impaired, nor diseased. The Rand Corp.'s survey indicated that four out of five cases closed were settled, only 18 percent were dismissed, and 4 percent went to trial.

These statistics, in the context of the findings of the American Lung Association and the California Workers' Compensation Institute, suggest that many of the thousands of asbestos lawsuits are either nonmeritorious from a product liability standpoint, certainly groundless from a workers' compensation standpoint, or are filed with the prospect of receiving some compensation regardless of the nature, extent or presence of any malady.

The prospects for recovery in tort, weighed against the different and properly stricter standard of disability required for workers' compensation, have brightened over the past decade, beginning with the fifth circuit's 1973 *Borel* decision, cited by one commentator as marking the beginning of Manville's journey into chapter 11.

So, given the evolving nature of product liability law, it is really not surprising to find so many lawsuits being filed, but the burden of that litigation should not be equated with the incidence of asbestos disease.

Still, obviously some employees tragically are disabled from asbestos disease. To the extent they are and avoid filing workers' compensation claims, the primary cost of compensating workplace injuries is shifted to parties outside the employer-employee relationship.

Workers' compensation thus is unable to fulfill its role in affording employees with relief for workplace hazards, and employers unable to meet their responsibilities in providing the primary compensation for workplace injuries.

The same result is obtained even when an employee files and recovers workers' compensation and third-party tort benefits where the employer, exercising its subrogation lien on the third-party award, is able to recover the cost of workers' compensation paid to the victorious plaintiff.

This shift in liability away from parties bearing primary responsibility also occurs when third parties are able to receive indemnification or contribution from an employer for the cost of the employee/plaintiff's third-party award.

Here, the cost of tort liability caused by parties outside the employer-employee relationship is shifted to parties within that relationship, accomplishing indirectly what the employee is prohibited from doing directly, and against which the employer was to be immunized in return for agreeing to pay statutory benefits in lieu of tort liability.

Clearly, this litigious tangle calls for better segregating workers' compensation and tort. And I am pleased that S. 44, as reported by the Commerce Committee, does so by abolishing subrogation, indemnification and contribution, along with reducing a third-party award by the amount of workers' compensation benefits paid. This scheme will produce a fairer allocation of liability between employers and third parties while not adversely affecting any employee's rights. I am also pleased to read that the AFL-CIO has endorsed these aspects of S. 44.

Although these provisions of S. 44 address what I view as a significant dimension of the asbestos controversy—cost misallocation between employers and third parties—the bill, unfortunately and for no justifiable purpose, exempts the Longshore Act from these provisions.

This is particularly troubling because asbestos disease workers' compensation claims, if they are ever filed, would likely be filed under the Longshore Act, if not FECA. Neither the current act nor the proposed amendments resolve this problem, as was assumed by the drafters of S. 44.

The aggravated relationship between the workers' compensation and tort systems has magnified the significance of insurance coverage disputes. Protracted litigation over the intentions of parties decades ago when no one contemplated the scope of the asbestos hazard has prevented resolution of the controversy.

It has been reported that numerous asbestos producers, insurers and plaintiff attorneys have reached a tentative accord under the auspices of the Center for Public Resources on establishing a central claims handling facility and on uniform liability coverage.

These efforts, headed by Dean Harry Wellington of the Yale Law School, are to be commended, for they may reduce pressure for a congressional response to the asbestos controversy.

Still, to the extent insurance coverage problems are not resolved voluntarily or by judicial action as is appropriate, Congress may be prompted to prescribe coverage rules governing asbestos tort liability. In that eventuality, I would not expect Congress' prescription to be inconsistent with the thrust of the judiciary's bias in favor of maximizing coverage.

My discussion of the tort system and its relationship to workers' compensation also leads me to raise another issue—the Federal Government's liability. I am not convinced that the Federal Government bears any liability for asbestos disease above its ability to pay FECA benefits to its own employees.

Having said this, however, I believe the inclusion of the FECA program within the scope of S. 44 to be entirely correct, and the Supreme Court's *Lockheed* decision to be equally incorrect.

If the so-called quid pro quo between employers and employees is to be more than mere sham, employers, including the Government, should not be subjected to liability above payment of statutory benefits stemming from the same work related incident, nor should the Government as employer be able to shift its responsibility for asbestos disease onto parties which, though responsible for placing in commerce a hazardous product, were not in the position to control its workplace use.

The asbestos producers, of course, not only intend to slough off their tort liability to Federal employees onto the Government, but to hold the Government liable for damages awarded to employees of Government contractors—essentially shipbuilders.

They seek to do so via a smorgasbord of legal theories, stemming from the Government's role in administering the strategic minerals stockpiling program, as a warrantor of the safety of asbestos, as a promulgator of specifications requiring asbestos use, as a guarantor of the safety of contractor employees, and as a promulgator of regulations designed to protect worker safety and health.

As I have told the asbestos manufacturers before, just because it may be unfair to hold them liable to the extent that they have been does not mean the Government should be held liable instead.

Finally, Mr. Chairman, I want to address whether any specific legislative remedy should be implemented for asbestos. In evaluating the asbestos litigation burden, it is important to understand what it is and what it is not.

The nature of asbestos litigation is essentially that of all product liability litigation. This is a crucial point of the Rand studies which has been largely ignored in the press. Rand's analysis reveals that the ratio of allocated defense expenses to compensation paid is not significantly higher in asbestos cases than product liability generally—42 percent versus 35 percent.

The modestly higher cost in asbestos cases, according to Rand, is traceable in part to the large number of defendants and insurers usually common in asbestos lawsuits, each with its own legal expenses.

So any special remedy for asbestos disease certainly cannot be predicated on defense costs. Indeed, the Rand study, in revealing that all product liability litigation is expensive, effectively underscores the need for generic product liability reform.

I agree, then, with Rand's conclusion that the heart of the asbestos litigation problem is its huge scale. As burdensome as that is, I do not believe a case has been made for Federal legislation.

Congress should defer where private parties have shown a willingness to resolve a dispute because I doubt that any remedy we might impose would be any cheaper or more equitable. Congress should never step onto the slippery slope of the disease-specific entitlement program envisioned by the asbestos producers. The horrors of the Black Lung Program should forever be a reminder of that folly.

Nor am I convinced that the problem justifies abrogating an employee's right to sue in lieu of a no-fault benefit, also a part of the asbestos producers' plan. That scheme, by which the asbestos companies merely rid themselves of all litigation, also denies injured employees the opportunity to individualize damages.

It appears to me that a far more balanced allocation of obligations and benefits derives from those aspects of S. 44 which I have discussed already. Workers' compensation is better segregated from product liability. Asbestos producer third parties cannot receive indemnification or contribution from employers, but then they are not obligated to pay the employer's subrogation lien. Moreover, any third-party award is reduced by the amount of workers' compensation benefits paid.

This arrangement preserves the employee's right to sue a negligent third party while effectively shifting from third parties to employers costs which the employers should be paying.

It is a sound compromise between the concomitant demands to assure a satisfactory level of no-fault benefits and to individualize damages. It would benefit all parties to the asbestos dispute.

Thank you, Mr. Chairman, for your courtesy in allowing me this time to share my thoughts with the subcommittee.

[The prepared statement of Mr. Erlenborn follows:]

OCCUPATIONAL DISEASE COMPENSATION

Statement By
U.S. Rep. John N. Erlenborn
Of Illinois

Before the
Subcommittee on Labor
of the
Senate Committee on Labor and Human Resources

Monday, May 21, 1984

Mr. Chairman,

I welcome the opportunity to share with you my perspectives of occupational disease compensation and, in particular, the asbestos litigation imbroglio.

Occupational disease compensation presents extremely complex issues and, as recent history proves, Congress should tread carefully in evaluating the nature of the problem and the advisability of any Federal response. These issues involve the extent of occupational disease, the ability of State workers' compensation laws to accommodate long-latency diseases, the evolution in products liability and its effect on workers' compensation in the asbestos context, and the responsibility of the Federal government.

The responsiveness of a compensation system can be judged fairly only by agreeing on a benchmark against which determinations can be made. Importantly, therefore, it is necessary to understand the incidence of occupational disease.

There have been innumerable studies, some purporting to show a large universe of occupational disease. These reports, not surprisingly, have received substantial media attention. I am not aware that one has withstood scientific scrutiny.

Former HEW Secretary Califano's announcement of 100,000 people dying annually from occupational disease has been so discredited that I am surprised to hear anyone repeating it anymore. So, too, has the 1980 Labor Department report concluding that two million workers are disabled annually by occupational disease, and the 1978 NIOSH Estimates Paper, concluding that there are 58,000 to 75,000 asbestos cancer deaths annually. In fact, two pre-eminent epidemiologists, Doctors Sir Richard Doll and Richard Peto, in a report for the Congressional Office of Technology Assessment, characterized the Estimates Paper as probably written "for political rather than scientific purposes...[and] should not be regarded as a serious contribution to scientific thought..."

It is fair to say that no one is certain of the extent of occupational, especially asbestos, disease, although the scientific community has shed considerable doubt on estimates in the higher range.

These doubts, at least as far as asbestos is concerned, are reinforced by testimony before the House Labor Standards Subcommittee and this Subcommittee indicating that relatively few have asbestos disease and even fewer are disabled by the disease. The American Lung Association characterizes asbestos tort litigation as "inequitable, costly, and markedly unjust in the distribution of resources [because] a higher proportion of awards [are] going to individuals in whom evidence of disease cannot be demonstrated." (emphasis added)

The California Workers' Compensation Institute reported to you its findings, indicating occupational disease claims as of early 1981 as accounting for only 1.6 per cent of all disabling injuries, with only .26 per cent attributable to asbestos. A California asbestos fund created in 1981, providing temporary disability and medical benefits, even after being liberalized to provide permanent total disability benefits and to remove what plaintiffs' attorneys viewed as impediments to filing, has failed to produce a wave of claims; of 37 cases accepted over a three-year period, only three involved payment of permanent disability benefits.

The Institute also reported on asbestos claim experience in the FECA program, finding that even with greatly liberalized eligibility criteria, only 13 per cent of asbestos claimants were entitled to any disability benefits, with only four-tenths of one percent (.004) qualifying for benefits based on lost earning capacity.

Yet, belief by some in a virtual epidemic of occupational disease persists, because that belief is compatible with either a pre-existing anti-corporate attitude, or a specified political agenda, or both. The AFL-CIO, for example, has long alleged unabashed support for Federalizing workers' compensation, and attests to a high incidence of occupational disease as a means of discrediting State workers' compensation laws.

None of this suggests that we should minimize the seriousness of occupational disease -- it is tragic, to the extent it exists at all -- nor that our compensation systems are faultless and a Federal response always inappropriate. It does argue, however, for maintaining a sense of perspective on an issue so emotionally charged, and for accurately evaluating the shortcomings in our compensation systems before reflexively promoting a Federal response. That path, as history has also proven, is not necessarily more equitable and it is rarely, if ever, less expensive.

In evaluating our compensation systems, it is necessary to examine workers' compensation programs both separately and in conjunction with the tort system. This is particularly so for asbestos diseases.

Although workers' compensation laws and their capacity to accommodate occupational diseases have progressed significantly from a period when occupational diseases were defined in order to exclude them from coverage, they have come under renewed attack, fed by reports of a high incidence of occupational disease and by some remaining shortcomings in a number of States which have encouraged the charge that workers' compensation is unresponsive.

That these attacks on the integrity of workers' compensation are made at all should give pause to those traditionally supportive of the system. Broad questions about the system's viability have been raised not only by organized labor and the judiciary but also, perhaps most significantly, by the insurance industry. Crum and Forster's Occupational Disease Task Force issued a report a year ago which concluded that:

> "State experience with the problems of compensating victims of occupational disease suggests that the National Commission's broad occupational disease recommendations should be redrawn to provide sufficient detail to guide

> legislative and administrative bodies toward a system that will function as smoothly for victims of workplace disease as they do for the victims of workplace injury..."

The Task Force recommended that the States, properly so, undertake this effort. Since then, 16 States with closed statutes of limitation and 14 States where benefits are based on wages at date of last exposure have been identified. To the extent these provisions prevent claims justifiably in the workers' compensation system from being filed or require benefits at levels not approximating today's wages, they simply cannot be justified; and a workers' compensation system in which such limitations persist is not fulfilling its role as the employee's primary source of support (and the employer's sole liability for workplace injuries).

Employers who view any workers' compensation changes as merely additional costs to be avoided ignore that there will be costs for compensating occupational disease. To some extent they cannot -- nor should they -- be avoided. Our social conscience accepts, in a broad sense, the premise of assessing those responsible for the misfortunes of another in order to provide just recompense. This sense of social justice has devolved into a legal system which affords injured workers redress against those responsible for their injuries.

Workers' compensation developed as a means of affording fairer, more expeditious relief to injured workers than the tort system could deliver. If the system fails to fulfill that role, the result is not necessarily any cheaper and is certainly not more efficient.

Broad concerns about workers' compensation have also been expressed in attacks on exclusivity -- notwithstanding that most have failed -- movement toward monopolistic State funds, and proposals to Federalize workers' compensation or otherwise supersede it.

About those Federal proposals: I am most familiar, of course, with H.R. 3175, introduced by my colleague, George Miller, and on which the Labor Standards Subcommittee has held hearings. It Federalizes workers' compensation for asbestos diseases and provides criteria for including diseases resulting from exposure to other toxic substances. The bill includes medically unsupportable presumptions and carves out asbestos disease victims for special treatment, so that employees equally disabled from other causes and receiving State workers' compensation would receive disparate benefits. Claims would be processed by the Labor Department's Office of Workers' Compensation Programs whose performance with Black Lung, FECA, and Longshore has been less than noteworthy.

A recent report by an analyst in the Labor Department estimates the Miller bill's costs between 1984 and the year 2015 to be from $44 billion to $156 billion. An earlier estimate by the Office of Management and Budget, drawing on another Labor Department analysis, placed the 30-year cost at $500 billion, with annual expenditures running at $30 billion by 2015. These costs would not only necessitate a Federal bailout, because industry would be unable to finance such a program, but would also require an immediate $1,000 per ton tax on asbestos, increasing to $3,200 per ton by 1990. The current selling price of asbestos is $340 per ton.

The Miller bill has other flaws. Its financing mechanism is a so-called Insurance Pool, to which asbestos producers and their insurers would contribute funds sufficient to finance benefits over the following year, based on an annual assessment by the Secretary of Labor.

However, it is not really an insurance pool at all, because contributions are not predicated on a defined risk, reserved against. It is, rather, merely a mechanism for taxing insurers and asbestos producers, and passing those revenues along to beneficiaries.

Furthermore, the bill states that asbestos producers can call upon any of their insurers to help meet their annual assessment. But whether, and to what extent, these insurers are liable to their insureds at all involves underlying insurance coverage issues which are still matters of State contract law.

The upshot could produce this scenario: Insurers refuse to contribute the amounts their insureds think they owe and the issue ends up being litigated. Meanwhile, asbestos producers, who are already contributing to indemnify risks for which they have already paid their insurers for years, must then contribute even higher amounts to meet the Secretary's assessment. The asbestos producers, unable to afford such massive costs, either "go Chapter 11" or threaten to do so, while calling on Congress to bail them out.

Finally, terming H.R. 3175 "workers' compensation" is probably a misnomer, because it envisions payment of a unified benefit in lieu of permitting separate damages recoverable through third party tort proceedings, and provides for funding so-called workers' compensation benefits by parties other than the employer. Then again, the bill does not provide merely a substitute for tort damages, because employees are covered and employers are included in its financing. So, it is not a tort bill. What it is for certain is a mystery.

Neither are Federal efforts to erode workers' compensation limited to workers' compensation bills, per se. Some toxic substance compensation proposals would effectively supersede workers' compensation by permitting employees to recover damages from employers for workplace exposures. Several of the bills purport to exclude workplace exposures through language prohibiting recovery of amounts by persons covered by State workers' compensation laws for which compensation is available under such laws.

Aside from leaving open the possibility of recovery under Federal workers' compensation laws, the term "available" really begs the question. It is unclear, for example, whether toxic substance compensation would be denied if an employee's workers' compensation claim is denied on its merits or even on procedural grounds. Moreover, nothing requires the employee to exhaust his workers' compensation remedy first. Even if it did, this merely provides a second bite of the employer apple, with the exclusivity doctrine rendered a nullity.

I have dwelt on these Federal proposals, Mr. Chairman, not only to highlight their manifold flaws, but also to caution anyone who still believes the Congress is the fount of wisdom on such issues and that the response to workers' compensation's problems is to do nothing or to let the Federal government step in.

I am aware that employer and insurance groups have paid heed to Crum and Forster's recommendations and, although not always agreeing with all parts of the report, are actively reviewing State workers' compensation deficiencies. They are to be commended and encouraged to move ahead. Failure to do so only serves to raise questions about employers' commitment to workers' compensation and permits organized labor to charge that the system is a failure. Organized labor, of course, also has an obligation, notwithstanding its position favoring Federalization, to participate constructively at the State level in legislating improvements. It is not consistent or defensible to complain about perceived failures in the system while sabatoging constructive efforts to promote needed changes.

No discussion of occupational disease compensation is complete without reference to the tort system and its relationship to workers' compensation. By now it is beyond peradventure that the asbestos litigation controversy is not the result of a failed workers' compensation system. The workers' compensation system is simply being bypassed by claimants in favor of third party product liability actions.

Workers' compensation claims not filed cannot be accepted or denied. When claims are filed, they are accepted overwhelmingly. According to the Labor Department's so-called Selikoff report, upwards of 90 per cent of claims filed in its survey were approved. Where claims are denied, the evidence from the California Workers' Compensation Institute and the American Lung Association indicates employees either were not disabled or did not have a disease. This is hardly the record of a failed workers' compensation system.

The tort system, on the other hand, is perceived as assuring more certain recovery, even though the plaintiff is neither disabled, impaired, nor diseased. The Rand Corporation's survey indicated that four out of five cases closed were settled, only 16 per cent were dismissed, and four per cent went to trial. These statistics, in the context of the findings of the American Lung Association and the California Workers' Compensation Institute, suggest that many of the thousands of asbestos lawsuits are either non-meritorious from a product liability standpoint, certainly groundless from a workers' compensation standpoint, or are filed with the prospect of receiving some compensation regardless of the nature, extent, or presence of any malady.

The prospects for recovery in tort, weighed against the different and properly stricter standard of disability required for workers' compensation, have brightened over the past decade, beginning with the Fifth Circuit's 1973 *Borel* decision, cited by one commentator as marking the beginning of Manville's journey into Chapter 11. Significantly, *Borel* not only imposed retroactively a duty to warn, but, by holding all defendants jointly and severally liable, relieved plaintiffs of the burden of showing concerted action by manufacturers.

The Sindell decision, prescribing a market share theory of liability in DES cases where a specific manufacturer could not be identified, also eased a plaintiff's burden of proof. The Beshada decision, holding Manville strictly liable for failure to warn of the hazards of asbestos, even if at the time of manufacture Manville could not have known of those hazards, effectively converted product manufacturers into insurers of every loss in perpetuity.

So, given the evolving nature of product liability law, it really is not surprising to find so many lawsuits being filed, but the burden of that litigation should not be equated with the incidence of asbestos disease.

Still, obviously some employees, tragically, are disabled from asbestos disease. To the extent they are, and avoid filing workers' compensation claims, the primary cost of compensating workplace injuries is shifted to parties outside the employer-employee relationship. Workers' compensation, thus, is unable to fulfill its role in affording employees with relief for workplace hazards; and employers unable to meet their responsibilities in providing the primary compensation for workplace injuries.

The same result is obtained even when an employee files and recovers workers' compensation and third party tort benefits, where the employer, exercising its subrogation lien on the third party award, is able to recover the cost of workers' compensation paid to the victorious plaintiff.

This shift in liability away from parties bearing primary responsibility also occurs when third parties are able to receive indemnification or contribution from an employer for the cost of the employee/plaintiff's third party award. Here, the cost of tort liability caused by parties outside the employer-employee relationship is shifted to parties within that relationship, accomplishing indirectly what the employee is prohibited from doing directly, and against which the employer was to be immunized in return for agreeing to pay statutory benefits in lieu of tort liability.

Clearly, this litigious tangle calls for better segregating workers' compensation and tort; and I am pleased that S. 44, as reported by the Commerce Committee, does so, by abolishing subrogation, indemnification and contribution, along with reducing a third party award by the amount of workers' compensation benefits paid. This scheme will produce a fairer allocation of liability between employers and third parties while not adversely affecting an employee's rights.

I am also pleased to read that the AFL-CIO has endorsed these aspects of S. 44.

Although these provisions of S. 44 address what I view as a significant dimension of the asbestos controversy -- cost misallocation between employers and third parties -- the bill, unfortunately and for no justifiable purpose, exempts the Longshore Act from these provisions. This is particularly troubling because asbestos disease workers' compensation claims, if they are ever filed, would likely be filed under the Longshore Act, if not FECA. Neither the current Act nor the proposed amendments resolve this problem, as was assumed by the drafters of S. 44.

The aggravated relationship between the workers' compensation and tort systems has magnified the significance of insurance coverage disputes. Protracted litigation over the intentions of parties decades ago, when no one contemplated the scope of the asbestos hazard, has prevented resolution of the controversy.

Courts have adopted various triggers of liability -- exposure, manifestation, or, in the *Keene* case, obligating all insurers on the risk at any time. Insurers have advocated differing theories as a means of limiting their liability to asbestos producers. Asbestos producers obviously have attempted to maximize their coverage. Courts, consistent with their traditional interpretations of insurance contracts construing ambiguous language in favor of coverage, and holding coverage co-extensive with legal liability, have obliged. Still, no uniform rules of liability have emerged from the judiciary because these are State contract law disputes of which the Supreme Court, properly, has denied review.

It has been reported that numerous asbestos producers, insurers, and plaintiff attorneys have reached a tentative accord under the auspices of the Center for Public Resources on establishing a central claims handling facility and on uniform liability coverage. These efforts, headed by Dean Harry Wellington of the Yale Law School, are to be commended, for they may reduce pressure for a Congressional response to the asbestos controversy.

Still, to the extent insurance coverage problems are not resolved voluntarily or by judicial action, as is appropriate, Congress may be prompted to prescribe coverage rules governing asbestos tort liability. In that eventuality, I would not expect Congress' prescription to be inconsistent with the thrust of the judiciary's bias in favor of maximizing coverage.

I would hesitate, of course, in imposing any such legislative remedy, especially retroactively. It would be unfortunate if a failure by the parties to reach an accord on coverage, or by the courts to provide a consistent interpretation, prompted Congress to act, because I believe that Congress should defer to the conduct of private parties and leave to the courts the interpretation of agreements reached freely between or among them. The sanctity of private contracts should be respected.

Given some recent decisions by the Supreme Court, however, such coverage legislation, even retroactively imposed, might well pass constitutional muster. Asbestos liability coverage rules could be interpreted as an economic regulation, to which the Court has traditionally accorded wide deference, regardless of their incompatibility with sound economics or even elemental fairness. Such legislation, carrying a strong presumption of constitutionality, could be viewed as adjusting the benefits and burdens of economic life, as constituting a rational means for regulating liability among private parties and, thereby, facilitating recovery by diseased victims.

I must emphasize, however, that I am not suggesting that Congress take this step. I am only constructing a scenario for how Congress might react if parties to the litigation and the courts fail to resolve this dispute. It is certainly in their interest to continue moving ahead.

My discussion of the tort system and its relationship to workers' compensation also leads me to raise another issue -- the Federal government's liability.

I am not convinced that the Federal government bears any liability for asbestos disease above its liability to pay FECA benefits to its own employees. Having said this, however, I believe the inclusion of the FECA program within the scope of S. 44 to be entirely correct; and the Supreme Court's *Lockheed* decision to be equally incorrect. If the so-called *quid pro quo* between employers and employees is to be more than mere sham, employers, including the government, should not be subjected to liability above payment of statutory benefits stemming from the same work-related incident. Nor should the government, as employer, be able to shift its responsibility for asbestos disease onto parties which, though responsible for placing in commerce a hazardous product, were not in the position to control its workplace use.

The asbestos producers, of course, not only intend to slough off their tort liability to Federal employees onto the government, but to hold the government liable for damages awarded to employees of government contractors -- essentially shipbuilders. They seek to do so via a smorgasbord of legal theories, stemming from the government's role in administering the strategic minerals stockpiling program, as a warrantor of the safety of asbestos, as a promulgator of specifications requiring asbestos use, as a guarantor of the safety of contractor employees, and as a promulgator of regulations designed to protect worker safety and health.

I am unaware of any court having accepted these theories of liability. Moreover, I believe the asbestos producers' arguments raise fundamental philosophical questions about the relative responsibilities of government and the private sector for employees' health and welfare.

If the government were to be held liable for protecting the health of private contractor employees for asbestos disease, it is only one step away from liability to all private sector employees predicated on its regulation of worker safety and health and of environmental hazards, generally. That result relieves employers not only of a moral duty to assure the health and safety of their own employees, but also of their statutory duties to provide a safe workplace under the Occupational Safety and Health Act and the Walsh-Healey Public Contracts Act, converting the government from a promoter of health and safety to a guarantor of everyone's health. Such a seminal change would have profound political, if not budgetary, consequences and should be soundly rejected.

As I have told the asbestos manufacturers before, just because it may be unfair to hold them liable to the extent they have been, does not mean the government should be held liable instead.

Finally, Mr. Chairman, I want to address whether any specific legislative remedy should be implemented for asbestos.

In evaluating the asbestos litigation burden, it is important to understand what it is, and what it is not. The nature of asbestos litigation is essentially that of all product liability litigation. This is a crucial point of the Rand studies, which has been largely ignored in the press. Rand's analysis reveals that the ratio of allocated defense expenses to compensation paid is not significantly higher in asbestos cases than product liability generally -- 42 per cent versus 35 per cent. The modestly higher cost in asbestos cases, according to Rand, is traceable in part to the large number of defendants and insurers usually common in asbestos lawsuits, each with its own legal expenses.

So, any special remedy for asbestos claims certainly cannot be predicated on defense costs. Indeed, the Rand study, in revealing that all product liability litigation is expensive, effectively underscores the need for generic product liability reform.

I agree, then, with Rand's conclusion that "the heart of the asbestos litigation problem is its huge scale." As burdensome as that is, I do not believe a case has been made for legislation. Congress should defer where private parties have shown a willingness to resolve a dispute, because I doubt that any remedy we might impose would be any cheaper or more equitable.

Congress should never step onto the slippery slope of the disease-specific entitlement program envisioned by the asbestos producers. The horrors of the Black Lung program should forever be a reminder of that folly. Nor am I convinced that the problem justifies abrogating an employee's right to sue in lieu of a no-fault benefit -- also part of the asbestos producers' plan. That scheme, by which the asbestos companies merely rid themselves of all litigation also denies injured employees the opportunity to individualize damages.

It appears to me that a far more balanced allocation of obligations and benefits derives from those aspects of S. 44 which I have discussed already. Workers' compensation is better segregated from product liability. Asbestos producer third parties cannot receive indemnification or contribution from employers but, then, they are not obligated to pay the employer's subrogation lien. Moreover, any third party award is reduced by the amount of workers' compensation benefits paid.

This arrangement preserves the employee's right to sue a negligent third party while effectively shifting from third parties to employers costs which the employers should be paying. It is a sound compromise between the concomitant demands to assure a satisfactory level of no-fault benefits and to individualize damages. It would benefit all parties to the asbestos dispute.

Thank you, Mr. Chairman, for your courtesy in allowing me time to share my thoughts with the Subcommittee.

Senator NICKLES. Thank you very much, Congressman Erlenborn. We appreciate your detailed study, and your entire statement will be entered into the record.

Senator Randolph, do you have questions to ask?

Senator RANDOLPH. Yes, I would like to just make a comment. Representative Erlenborn, I know, has had a constructive record in the House for 20 years. Is that not right?

Mr. ERLENBORN. That is right, Senator.

Senator RANDOLPH. Yes.

Mr. ERLENBORN. And I note that you and I are deciding concurrently to leave the Congress at the end of this session. I hope that you have as much fun in your retirement as I plan to.

Senator RANDOLPH. Yes. Well, I am not retiring; I am just changing jobs. There is a difference.

Mr. ERLENBORN. Me, too.

Senator RANDOLPH. Yes, indeed. But, John, I do know that you are a person that has gone into these matters very thoroughly. I remember the days when we were shifting from addressing the Occupational Safety and Health Act to, frankly, something I pleaded for that I felt there was a priority for. We had the Coal Mine Health and Safety Act of 1969 moved up for consideration. They were both important.

I want to be careful now because I am not critical of what you are saying, but you used the word that the black lung law that we passed here was—I do not know whether you said——

Mr. ERLENBORN. I think I called it a horror story.

Senator RANDOLPH. You did use the word "horrors." I am trying to have you clarify that statement:

Mr. ERLENBORN. Yes, I would be happy to, Senator, just very quickly. The history will show that in subcommittee, in full committee and on the floor of the House, I worked, together with one of the principal movers, the former Congressman from California, Phil Burton, and along with John Dent, in producing what we thought was a fair and workable pneumoconiosis compensation program in the context of the Coal Mine Health and Safety Act of 1969.

One of the features of that bill as it passed the House, which was also a feature of the bill as it passed the Senate, was to limit compensation only to those who had progressive, massive fibrosis; that is, the third stage of black lung.

Now, this was based on uncontroverted medical testimony. It was based on the International Labor Organization's classification for black lung and was absolutely correct. The only stage of black lung that is disabling is the third stage, progressive, massive fibrosis.

In the conference, which was hurried up to be finished on the anniversary of the Farmington coal mine disaster—

Senator RANDOLPH. That was in West Virginia.

Mr. ERLENBORN. That is right.

Senator RANDOLPH. Yes, sir.

Mr. ERLENBORN. And in that conference, although this was not a matter that was conferencable because both bills were identical, the reference to the third stage, or massive, progressive fibrosis, was removed so that any stage of black lung could be compensated.

At that point I fell off the bandwagon, Senator, and I raised points of order on that basis and others against the report which I still to this day think were valid. The two Houses had agreed that only the third stage would be compensated, and yet the conference report went to even the first stage, which is in no way disabling.

Well, that, together with subsequent legislation which put in other liberalizing factors, including presumptions which were not based on medical evidence, led to the conclusion of the General Accounting Office—not my conclusion, but theirs, in a report that they issued to me about 3 years ago—that in almost 90 percent of those cases that have been granted compensation, there is either insufficient or no medical evidence of disability due to coal workers' pneumoconiosis.

In other words, the compensation is not going to those who are disabled, as proven by the record, and this is what I mean by a horror story.

Senator RANDOLPH. Yes. John, I want to ask you a very pointed question and I know you will not object. That law is still on the books.

Mr. ERLENBORN. It certainly is.

Senator RANDOLPH. Yes, and have you made an attempt to take it from the books?

Mr. ERLENBORN. You bet I have. I was trying, Senator, over the course of the years to fulfill the promise that was made by Phil Burton, by John Dent and others that coal workers' pneumoconiosis compensation was going to be retrospective only. We were going to pick up the compensation bill at the Federal level only for those who had been ill-served or not served at all by the State workers' compensation programs, and that within a year after passing that law we were going to have workers' compensation take over the compensation of these victims.

That was a good plan. Those were very valid promises, and I have worked consistently since then. Although those who made the promises kind of forgot them, I have been working consistently to stop the Federal compensation and turn this over to State workers' compensation, since every State now provides coal workers' pneumoconiosis compensation.

That would be fair to the workers, Senator, because then one who is totally disabled from black lung would get the same compensation as one who is totally disabled by a roof fall or other injury.

Today, those compensations are not identical or even close to the same because you have two different systems furnishing the benefits.

Senator RANDOLPH. John, is there pending legislation in the House under your name or you joined with others on this subject?

Mr. ERLENBORN. No. I think my last attempt was in the first year of the Reagan administration when some amendments were being made to the black lung, with the support of the producers, the unions and the administration, and I was very outspoken at that time saying that it did not go far enough to reduce the costs.

What we did then was to shift a lot of the cost away from the taxpayers and impose more of the cost on the producers by increasing the tax that they have to pay to the black lung compensation fund.

The promise then, by the way, was that that was going to make the fund, which was then going quickly bankrupt, self-sustaining. I will point out that its deficient nature continues even after that legislation passed.

But when I found that even this administration would not join with me in trying to repeal this legislation and were settling for rather minor adjustments, I decided that beating a dead horse was not a very productive thing for me to do and I turned my attention to something else, like improving IRA's, individual retirement accounts, and other things that made people happy. [Laughter.]

Senator **Randolph**. I remember that Senator Dole, handling the Black Lung Benefits Amendments of 1981 in the Senate Finance Committee and on the Senate floor, finally went along with me in continuing the Black Lung Program as we now have it. I recall the debate in December of 1981 during the consideration of the Black Lung Benefits Amendments Act of 1981. The Black Lung Benefits Act has aided thousands of miners, their families and survivors. As an original sponsor of the black lung measure and subsequent extensions of the act, I remain commited to its purpose. The Black Lung Program was designed to bring urgently needed assistance to miners who are disabled and to the survivors of miners who have died due to pneumoconiosis. While there have been many difficulties in its administration, we must consider the benefits that have been extended to our mining population that for so many years mined our Nation's coal with no prospect of compensation and no controls for this disabling disease.

Whether Senator Dole did the right thing at that time, why you would differ with him, presumably. But this has been a continuing concern of mine, as it has been of many others who were a part of the programming of both these laws, the 1969 law for coal mine safety and health and the later 1970 law for occupational safety and health.

I think, Chairman Nickles, that I am going to be very frank and say that I am going to try to bring myself in the next few days up to date on all of the matters that you, Mr. Erlenborn, have discussed here today.

I am not saying that there is not merit in what you are saying, but in a degree, at least, there is a reply, or at least partial replies that can be made in reference to this subject matter.

Thank you very much.

Senator **Nickles**. Thank you, Senator Randolph. Congress did enact in 1981 some modifications which dealt with the Black Lung Program. They were primarily on the presumptions which were in the existing law that did help tighten it up, at least prospectively.

I think most everyone agreed in a bipartisan manner that those were good and positive changes. Many would argue that we could have done more and possibly should have done more. Some improvements were made which I think have been of benefit in trying to eliminate some of the abuse in that program which was found.

Congressman, in your statement you encourage asbestos producers and insurers to continue with their efforts to resolve contract coverage disputes to forestall any temptation by Congress to intervene and come up with a solution.

Do you know what the status of these negotiations are and their prospects for success?

Mr. **Erlenborn**. Well, I understand, Senator, that an announcement was made last Friday that the negotiating parties had reached an accord, but that, of course, is not the end of it. It still will require the agreement of the boards of directors of the respective companies involved.

I think the prospects for success really depend on the comprehensive participation of the parties. If all or most of those who were involved in this should adopt this approach, I think it can work. If only a few do, I think it will be less than satisfactory.

Senator **Nickles**. Are you aware of any major parties not participating?

Mr. **Erlenborn**. Well, I understand that the Travelers Insurance Co. is not participating because it does not wish to prejudice its position in ongoing litigation with the Manville Corp., which is refusing to participate.

I understand that Manville has refused to consider dropping its suit to permit both Travelers and itself to participate. This is at the same time that Manville is before this forum complaining about the failure of the system and the need for a Federal bail-out.

Senator **Nickles**. You mention in your statement that you recommend against any specific remedy for asbestosis, including that advanced by Manville and other asbestos producers, because Congress should not embark on another entitlement program similar to black lung.

How is the Manville proposal an entitlement program?

Mr. **Erlenborn**. Payment of the no-fault benefits envisioned by the Manville legislation are triggered by an approval of the individual's workers' compensation claim or, in some instances, a determination that procedurally workers' compensation would be denied if a claim were filed.

In either case, benefits for which the Government is obligated to pay 50 percent are automatic once the individual jumps through the workers' compensation hoop.

Senator **Nickles**. Is it not a strength of the Manville proposal, however, that it does not federalize workers' compensation and, in fact, relies on existing workers' compensation systems?

Mr. **Erlenborn**. No, Senator, for two reasons. First, it is true that it does not federalize workers' compensation, but it does establish another Federal compensation system. And on this crucial point it is irrelevant whether we call it workers' compensation or no-fault tort. It is still another Federal entitlement program.

Second, the proposal does not simply call for adjudicating the workers' compensation claim first, prior to evaluation of the merits of the tort compensation, but bases entitlement to tort compensation on successful adjudication of the workers' compensation claim.

This scheme ignores the different bases for compensation between workers' compensation and tort. Workers' compensation is predicated on disability, while tort encompasses disability, impairment, pain and suffering, and egregious conduct which would justify punitive damages.

By basing entitlement on workers' compensation, the proposal effectively narrows the scope of tort awards to that of workers' compensation inappropriately, in my view, and thus relieves Manville and other asbestos producers of far more potential liability than simply litigation costs.

Senator **Nickles**. You also mention your opposition to the Federal Government if there was a pool-type situation as proposed where the Federal Government would be putting up the 50 percent. Would you object if that was 25 percent or 15 percent?

Mr. **Erlenborn**. Oh, yes. It is not the level of the contribution, but the fact that the Federal Government is required to contribute over and above their liability to their own employees that I think is objectionable.

Senator **Nickles**. Senator, did you have any further questions?

Senator **Randolph**. No, nothing further, except I do want to say to the Representative that although we have had disagreements on these matters, I consider you well informed and your thinking is not warped.

We have had differences of opinion of the depths of some of the matters that you call horrors, which I would not agree with, but that is not to say that there has not been some abuse, certainly, and I have recognized it and tried to correct it at times.

But that, Mr. Chairman, could be said of any piece of legislation that comes from the Congress that has compensation involved in it.

Mr. **Erlenborn**. I thank you, Senator. Let me say that I have enjoyed very much working with you over the course of the 20 years I have served here, and I have always found you to be extremely well informed. I know, if I were to stay another 20 years to match your 40, I would not be able to keep up with you.

Senator **Nickles**. Thank you very much for your appearance before the committee today.

Mr. **Erlenborn**. Thank you.

Senator **Nickles**. Our next panelist, B. Wayne Vance, represents the Department of Justice as Deputy Assistant Attorney General.

Mr. Vance, please proceed.

STATEMENT OF B. WAYNE VANCE, DEPUTY ASSISTANT ATTORNEY GENERAL, CIVIL DIVISION, U.S. DEPARTMENT OF JUSTICE, ACCOMPANIED BY PETER NOWINSKI, SPECIAL LITIGATION COUNSEL

Mr. **Vance**. Thank you, Mr. Chairman. Allow me first to introduce my colleague who is with me this morning, Mr. Peter Nowinski, who is Special Litigation Counsel at the Department of Justice. In that capacity, Mr. Nowinski has day-to-day oversight of the asbestos litigation that we are involved in.

I will summarize my statement which I have formally submitted for the record.

Senator **Nickles**. Thank you.

Senator **Randolph**. Mr. Chairman, might I interrupt?

Are you related to Cyrus Vance?

Mr. **Vance**. No, Senator, I do not believe so, though I believe we have the same country of origin.

Senator **Randolph**. Well, I do not want to mention too much about anyone, except when there is a West Virginian involved I try to identify someone with him when he has had a good record.

Mr. **Vance**. And he has. Thank you, Senator.

Senator **Nickles**. Would you mind pulling the microphone up closer, Mr. Vance?

Mr. **Vance**. Sure.

Senator **Nickles**. Thank you.

Mr. **Vance**. Mr. Chairman, we are here, of course, to testify concerning asbestos and certain aspects of the serious problems raised by the production and use of this dangerous material. The human tragedy is enormous.

There have been many schemes suggested to deal with the asbestos problem. Those who manufactured and sold the product and who now face liabilities would, of course, like to have their burdens given over to the taxpayer.

In my statement I have discussed several legal and equitable reasons why the taxpayer should not be compelled to come to the aid of this industry. Let me briefly summarize them. First, however, let me emphasize that I do not mean to indicate a lack of concern for the individuals who suffer grave injuries from asbestos exposure. Those persons must be cared for and the taxpayers have expended great sums through available programs to provide care, as outlined in my statement.

A brief description of the history of asbestos use and the Government's role: Research and discovery in litigation have shown that the Government's role vis-a-vis the manufacturers was that of a customer.

In the early part of this century, the manufacturers succeeded in establishing the United States as their largest buyer primarily through their development and aggressive marketing of products extremely useful as heat and fire retardants aboard ships.

The Government did not compel the development of these commercially available products. At the urging of industry, it specified them for purchase and the industry made enormous profits from the sales.

To argue that the relationship was other than customer and seller is disingenuous, at best. The attempt by the manufacturers to obtain indemnity from the Government under these circumstances has caused one court to comment pointedly, as I have mentioned on page 6 of my testimony:

> These were national manufacturers maintaining national sales staffs, regional sales offices, special sales representatives, and programs to interest and sell their products to the United States, their major customer. In our view, their effort to impose the woes of asbestos contamination upon the customer whom they so actively pursued is grossly misplaced.

Also important to the history of this matter is who knew what and when about the hazards of asbestos, and what they could and did do about it. Research shows that there were discussions early in the century about the dangers of asbestos. The leading producer had the results of a study in the 1930's concerning plant exposure and related hazards.

Despite its knowledge, however, the industry has for decades sought to suppress information from the public and its workers.

Where information was released or discussions had, they were carefully crafted to enable the most profitable continuation of manufacturing and sales of asbestos.

I believe it is accurate to say that certain manufacturers have delayed taking steps to protect workers, but for decades have foreseen and prepared for the present confrontation.

Two examples of the conduct of the major asbestos suppliers are indicative of the mindset of some companies in the industry. We are aware of recorded minutes of conferences of a company's officers responsible for the safety and health of workers showing conscious decisions not to inform or to transfer particular workers identified by name who were suffering from early or even advanced cases of asbestosis. This occurred in the 1950's. The interest was in continuing production, avoiding disturbances, and, specifically, in avoiding litigation.

We are aware that in 1942, at the height of World War II, over a lobster luncheon in New York headquarters, top officers of the leading producer frankly acknowledged to another more concerned, industry official that they did not inform their workers about asbestos disease. They further stated that they thought the other official foolish if he did so because it would lend workers to initiate costly workmen's compensation claims.

Nor were plant conditions improved until many years later. The entire scenario frankly reads like a Charles Dickens novel about 19th century industrial England.

The difference between the actions taken by manufacturers and the Government is striking. Some manufacturers, knowing the hazards, sought to deceive and dissemble during critical periods in development of knowledge about asbestos, all to the end of continuing unabated sales and production.

The Government sought to develop knowledge and to inform. It attempted, at times perhaps naively, to do this with and through the industry. It attempted to enforce exposure standards where it was empowered to do so.

Johns-Manville's recitation of occasional reports of conditions at Government shipyards is evidence not that conditions were deplorable, but that great care was being taken to have standards maintained and to find and avoid lapses.

At this same time, the industry sought to avoid and enjoin the implementation of lower standards of exposure. Indeed, as late as this very year, 1984, they succeeded in enjoining the issuance of new emergency asbestos standards by EPA.

The manufacturers have based some of their litigation seeking indemnity from the Government on GSA sales of surplus raw asbestos to the manufacturers. Given the detailed record of industry knowledge it is almost humorous for them to allege the Government did not warn them about the dangers of the raw asbestos they purchased.

Simultaneous efforts to obtain judgment against the United States for installation work done for the Government at private shipyards, or at Government shipyards have not been successful. The industry argues that the recent *Lockheed* decision of the Supreme Court will change that. I disagree with that analysis and have discussed if in my statement.

We have litigated against the manufacturers under the *Lockheed* conditions prior to the *Lockheed* decision and we have won. Further, *Lockheed* will simply cause the courts to look to State law on contribution and indemnity, and we have and will continue to win there.

The fact that courts may hear arguments against the Government as ship owner is also not indicative of any signal victory by the industry.

Significant to the question of who pays the cost of the damage done by asbestos products are the enormous costs already paid by American taxpayers. I have outlined some of those in my statement. They include FECA and other costs under assistance programs, removal costs, court expenses, and untold indirect costs. I believe it is singularly significant that it could cost the American taxpayers $2 billion to remove the asbestos products from their Navy fleets.

Aside from the argument of who is responsible, there are other broader issues I have tried to address in my statement. The question of whether the tort system can adequately handle this litigation is important. I cannot offer a conclusive answer, but it is right to ask whether alternative mechanisms of dispute resolution procedures might be appropriate.

Great care must be taken should Congress determine to provide a compensation scheme. We do not necessarily oppose compensation, but adamantly oppose putting any greater burden on the American taxpayer for the harmful consequences of the use of asbestos products.

Compensation schemes of any kind have inherrent dangers that must be addressed. They are difficult to control and the total cost may have no rational relationship to expectations.

Further, I have mentioned some important fairness issues in my statement. These issues involve who gets paid and who does not, and why. Why should one cancer victim be compensated and not another? Can we pay all cancer victims? All cancers have a cause. Why should we pay only those whose cause may be determinable?

Also, should we address only one aspect of the toxic injury problem at a time, one toxic substance per program or compensation scheme?

Asbestos is part of a larger problem with overlapping issues. Do we have the resources for some of the suggested responses? Are any of the suggested schemes really better than what can be done under existing facilities and mechanisms?

In conclusion, Mr. Chairman, while sympathizing with the suffering of victims and recognizing the serious strain which the asbestos litigation has placed upon the judicial system, the administration is hesitant to endorse a sweeping legislative resolution of the issue at this time.

Fundamental issues of fairness argue for placing the cost of this tragedy on the companies which have benefitted from asbestos sales for over half a century. Hard-learned experience with other compensation systems leaves us reluctant to endorse a comprehensive, federally funded and managed compensation scheme.

We compliment the members of this committee and others in Congress who have approached this issue in a responsible manner and we stand prepared to work with you to address the problem.

Mr. Chairman, I will attempt to answer any questions that the subcommittee may have.

[The prepared statement of Mr. Vance follows:]

PREPARED STATEMENT OF B. WAYNE VANCE

Thank you Mr. Chairman. I appreciate the opportunity to testify before the Committee today on the problems of workplace hazards, most notably, those occupational diseases contracted from exposure to asbestos. The issue before the Committee today is an important one and, over time, we have started to reap the significant consequences caused by the use of asbestos. After a long latency period, thousands of workers exposed to this substance in shipyards, factories and elsewhere have contracted asbestosis and asbestos-related cancer. Serious questions have been raised as to the ability of the legal system to resolve these issues, the appropriateness of a legislatively-established compensation scheme and most significantly, the question of who, if anyone, should be assigned the blame for this tragedy. Let me begin with a brief review of the history of the industrial uses of asbestos, which will, I think establish who is at fault.

In the second half of the last century, various entrepreneurs, including the corporate ancestors of the asbestos companies now in litigation, discovered that asbestos possessed outstanding heat-resistant properties making it usable as insulation. Then, as now, the government relied largely on the research and marketing efforts of private enterprise to identify and develop products for use by the military. As early as 1898, private firms were calling the Navy's attention to the insulation properties of asbestos. Significant orders for asbestos were placed by the Navy during World War I, after an aggressive sales campaign by the manufacturers.

Use of asbestos by the government, and aggressive marketing by private firms continued into the 1930s, despite growing indications that the substance posed a serious health hazard to some people. As a result of litigation, correspondence between leading asbestos manufacturers during the 1930s has surfaced which indicates that corporate officials were aware of some of the health hazards, but deliberately avoided further research and sought to downplay the risks. Incredibly, one official wrote that "our interests are best served by having asbestosis receive the minimum of publicity". This and other materials document an appalling history of corporate irresponsibility and led one court to comment that a jury was justified in concluding that a defendant manufacturer:

> fully appreciating the nature, extent and gravity of the risk, nevertheless made a conscious and coldblooded business decision, in utter and flagrant disregard of the rights of others, to take no protective or remedial action.

Fischer v. Johns-Manville Corporation, (App. Div., Sup. Ct. N.J.; January 31, 1984), Asbestos Litigation Reporter, pp. 7,806-7,819.

In contrast, the United States government, by its own initiative, aggressively pursued research into the health hazards of asbestos. A study of asbestosis in the textile industry in 1938 was used as the basis for reduced exposure level and the Navy established safety regulations consistent with the then current scientific wisdom on the dangers of asbestos. However, the asbestos industry continued to drag its feet at taking precautions. Even as late as the 1970s, the asbestos industry objected to lower OSHA exposure standards despite the mountain of evidence on the clear health hazards.

We believe that the record clearly establishes that asbestos manufacturers were irresponsible in the way they produced and marketed their products long after serious health hazards had been discovered. Certainly, courts which have adjudicated this issue have concluded that the asbestos manufacturers are legally responsible to affected workers. Just as clearly, these courts have uniformly rejected efforts to shift liability to the United States.

Asbestos manufacturers, as well as some private plaintiffs, have attempted to hold the government liable under a number of legal theories based on statute and common law. First, the industry and plaintiffs have argued that the government is liable for selling the industry asbestos from its strategic stockpiles without repackaging the substance with warning labels. This position is untenable, however, because stockpiled asbestos was purchased at the recommendation of the industry in the period during World War II and resold at a loss to the same, knowledgeable industry buyers when supplies were otherwise unavailable or the stockpiles no longer necessary. While the asbestos was not repackaged and labeled (primarily to save the government money, at the direction of Congress), the industry executives who purchased and received it were certainly aware of its nature and the associated hazards.

Further, numerous asbestos lawsuits have arisen out of injuries sustained by employees of privately-owned shipyards doing business with the federal government. Based on the government's endeavors, through the Walsh Healy Public Contracts Act, to ensure a safe workplace for employees of government contractors, the industry has alleged that the government is liable for a failure to fulfill this duty adequately. This challenge has been rejected where it has arisen.

Finally, the government has owned and operated some shipyards where asbestos was installed. Naturally, the government provides compensation under the Federal Employees Compensation Act (FECA) for employees who suffer disability because of their exposure to asbestos and, in turn, federal employees are precluded from suing the government. Moreover, manufacturers seeking indemnification from the government for injuries caused to federal employees have been unsuccessful.

The recent decision of the Supreme Court in Lockheed Aircraft Corp. v. United States, 103 S.Ct. 1033 (1983) does not change the government's indemnity liability for asbestos claims. In that case, the United States paid death benefits, under FECA, to the survivors of a civilian employee of the Navy killed in the crash of an aircraft manufactured by Lockheed. The pilot's estate then sued Lockheed, which settled and sought indemnification from the United States. The Court held that FECA's exclusive liability provision, 5 U.S.C. 8116(c), which prohibits actions against the United States by "an employee, his legal representative...[or] any other person otherwise entitled to recover damages from the United States...because of the [employee's] injury or death", did not bar recovery. The Court held that section 8116(c) only cuts off the rights of employees, their relatives and people claiming through them; unrelated third parties do not benefit by the "quid pro quo" compromise of FECA, and, hence, may still bring actions for indemnification in those states that allow it.

The Lockheed decision is essentially irrelevant to asbestos litigation because it did not alter the ability of third parties, such as asbestos manufacturers, to bring successful indemnification actions against the United States. The Fourth Circuit had already adopted the Lockheed theory in an earlier case, Wallenius Bremen v. United States, 409 F.2d 994 (4th Cir. 1969). In a subsequent asbestos case, relying on this Lockheed-type precedent, a court ruled for the government on the merits, concluding that the manufacturer's breach of its duty to warn the employee of the hazards was direct, active negligence, thus defeating its right to bring an indemnity action against the United States where relevant state law permits such actions:

> The evidence in this case nowhere approaches any showing that the manufacturers were a lesser or "passive" force as opposed to any supposed "active," overwhelming misfeasance of the United States. These were national manufacturers, maintaining national sales staffs, regional sales offices, special sales representatives and programs to interest and sell their products to the United States, their major customer. In our view their effort to impose the woes of asbestos contamination upon the customer whom they so actively pursued is grossly misplaced.

Glover v. Johns-Manville Corp., 525 F. Supp. 894, 896 (E.D. Va. 1979), aff'd 662 F.2d 225 (4th Cir. 1981). Thus, the asbestos manufacturers have not gained legal rights by the Lockheed decision which they had not already asserted, in the context of asbestos litigation, to no good effect.

Even in the absence of any adverse legal judgment, the American taxpayer has borne, directly or indirectly, a substantial burden in the asbestos tragedy. Payments under FECA and various entitlement programs, costs to remove asbestos from government facilities, lost tax revenue and medical costs reimbursed by the government will ultimately total billions of dollars.

- Since the mid-1960's, the taxpayers have (through NIH, NIOSH, EPA, CPSC, and other agencies) spent well over 70 million dollars to conduct medical research in order to determine the risks of asbestos exposure and to develop recommended guidelines for controlling exposure to asbestos.

- The government has made substantial payments to injured workers under FECA and related programs. The VA has also expended significant sums to provide medical care benefits.

- Even more staggering are the costs to the taxpayer to eliminate the asbestos hazards in the government's own facilities. GSA estimates that it will cost 225 million dollars over the next five years to control asbestos in priority government-owned buildings. Additional costs will be incurred in abatement procedures including higher lease payments and the costs of moving. It will cost the Maritime Administration nearly 16 million dollars to eliminate the hazard in its merchant fleet and GSA will have to expend approximately seven million dollars to safely secure and dispose of its asbestos stockpiles. As yet, we cannot estimate the cost of abating the problem in military facilities generally, but preliminary figures suggest that it may cost the Navy two billion dollars to remove asbestos from the fleet.

- And there are other, less obvious costs. For example, it has been estimated that the federal courts expend 40 million dollars per year to adjudicate the thousands of asbestos cases that fill their dockets. Indeed, in the next decade, the total cost may exceed half a billion dollars.

- Moreover, to the extent that people who have developed asbestos-related diseases receive payments (in the form of social security disability insurance, Medicaid, etc.) that they otherwise would not have needed, asbestos will cause a further drain on the public

> purse. Excluding Medicare payments, this added expense will total 465 million dollars between 1980 and 1994. And, of course, but for the asbestos-related disease, most these people would be productive, taxpaying citizens, rather than tax consumers.

Yet, despite this enormous financial burden which the taxpayer is already carrying, several asbestos manufacturers have taken advantage of the bankruptcy laws in an effort to insulate themselves from liability for their actions and have petitioned Congress for financial relief. We believe that any such scheme for industry compensation from the national purse would be completely unjustified. The record clearly indicates that the manufacturers were aware of the health hazards posed by their product, made no effort to provide warning or protection and, instead, pushed ahead with an aggressive marketing campaign. There is no reason to reward this conduct with a financial subsidy from the treasury.

Nevertheless, we do recognize that the tort system absorbs substantial sums of money in transaction costs, as recent studies have indicated. The Administration welcomes responsible attempts at resolving the asbestos compensation problem, but can not support any such schemes if they are funded by the national treasury. However, any compensation system which might be designed contains numerous pitfalls which must be avoided.

New legislation should be measured against remedies now available. Bills now before Congress relating to compensation for exposure to asbestos contain a number of possible alternatives to the current system. They vary in coverage, in administrative procedures and remedies, standards for liability, funding mechanisms, exclusivity of other remedies, court jurisdictions and review, and other matters. In examining these schemes, we need to answer very specific questions about their relative benefits, their other costs over time, the extent to which they may duplicate presently available remedies, the extent to which they fairly allocate transfer payments in a manner consistent with acceptable societal goals and the extent to which any legislative program can be kept within sensible bounds over the future.

The history of the last several decades teaches us two troubling lessons: income distribution schemes have proven very difficult to control and many times the total costs of such programs have been vastly understated at the time of passage. The terrible object lesson in the toxic and environmental hazard area is the black lung program. The billions of dollars it has cost the taxpayers were not even hinted at by its proponents; indeed, if its true costs had been known from the outset, it is difficult to believe that it would ever have been enacted. In addition, the black lung program demonstrates the tendency to add beneficiaries to any income distribution program who seem similarly situated to the original beneficiaries, thus multiplying the program's costs. The cold, hard reality is that whatever genius is used to fashion new legislation, we know there is a dire risk that the original sensible scheme will be turned into an economic monster. That risk creates large budgetary and fiscal dangers. Perhaps even more important, however, in an era of limited resources, it also threatens to reduce our future flexibility to deal with the other problems of our society.

Moreover, one of the things we must recognize at the outset is that this is a broad problem which must be considered, analyzed and addressed in a comprehensive manner. In the past, various areas of occupational and environmental torts or injury have been dealt with on a piecemeal basis. In addition to the asbestos problem, there have been proposals to amend the hazardous waste statutes to deal with injuries from toxic waste sites, separate proposals concerning radiation-caused cancers, diseases associated with exposure to Agent Orange and uranium mining diseases, to name a few. Some of the proposals do not appropriately recognize the difference between workplace and nonworkplace exposure. For the most part, these proposals have been considered in relative isolation from each other. This kind of disjointed consideration of what are economically, socially and politically related topics may make no sense.

The fact is, each day there is a growing recognition of an expanding range of workplace and environmental problems which may have injurious effects on individuals and which result in pressure for legislative solutions. Yet, adopting fragmented solutions raises problems of fairness to claimants not covered or those denied other benefits because of the resources devoted to particular compensation schemes, as well as issues of society's priorities and the scientific uncertainty regarding the causation of a particular disease. If we were to adopt a governmental solution for some of these problems but not others, disfavored claimants could properly charge that they had been treated unfairly. On the other hand, when we look at the whole range of problems as an amalgam, we recognize that financially and administratively, an overall solution raises very extreme resource allocation issues.

Another general point is a further development of the fairness issue. The current push is for special solutions for those individuals suffering from cancer or other maladies where we have isolated, or think we may have isolated, a cause of the disease. Those victims of diseases, however, are only a fraction of people similarly afflicted. No doubt a high percentage of others suffer from similar diseases, although we may only discover the cause of their disease in the future or we may never discover it. One might question whether it is fair to have a special compensation scheme for individuals who happen to suffer cancer from an identifiable cause, or one thought to be identifiable, but not for those suffering the identical disease where we have not yet identified the cause. Under the tort system, such a result arguably makes equitable sense because the "wrongdoer" will pay. Under many of the schemes proposed as legislative solutions, however, there would be no specific or known "wrongdoer" initially footing the bill; rather, society would be funding the relief more broadly through taxation, fees, general revenues or increased product costs. We might also ask whether a government program might not remove any incentive for the party responsible for the exposure to correct conditions.

Any answer to these interrelated problems will require us to analyze, question and perhaps make alterations in our fundamental legal institutions and procedures. For example, for many decades the torts system has provided a fairly effective mechanism for compensating victims of environmental and occupational hazards, at least in a great number of cases. Recently, however, some have asserted that the torts system is an inefficient and ineffective means of compensating victims of such hazards. In support of this assertion, statistics have been compiled which show that a very high percentage of the dollars expended in the asbestos cases have been paid not to victims but to lawyers and paralegals and others who are simply part of the compensation system.

The statistics referred to may well be accurate, but before reaching too much of a firm conclusion on the basis of them, at least two additional questions should be considered. First, do the high costs of these cases simply reflect the fact that they are at a relatively early stage? Such litigation entails large upfront costs for computerizing documents and other background materials and otherwise preparing to defend massive litigation. Second, are the alternatives that have been proposed substantial improvements over the current situation, when all their costs and benefits are considered? This may well be a promising area for alternate schemes for private dispute resolution.

In conclusion, Mr. Chairman, while sympathizing with the suffering of victims and recognizing the serious strain which the asbestos litigation has placed on the judicial system, the Administration is hesitant to endorse a sweeping legislative resolution of the issue at this time. Fundamental principles of fairness argue for placing the cost of this tragedy on the companies which have benefited from asbestos sales for over half a century. Hard-learned experience with other compensation systems leaves us reluctant to endorse a comprehensive, federally funded and managed compensation scheme. We compliment the members of this Committee and others in Congress who have approached this issue in a responsible manner and we stand prepared to work with you to address the problem.

Senator NICKLES. Thank you very much, Mr. Vance.

When did the Government first learn that excessive asbestos exposure could cause physical injury?

Mr. VANCE. There were discussions in journals and among physicians both here and in England in the early part of the century. There was a study completed by the Metropolitan Insurance Co., funded, by Manville, which showed that there were hazards to in-plant workers. I think that was public in 1934 or 1935.

A study was completed in 1938 by a group sponsored by the United States; I forget which agency or group it might have been. That showed, too, under plant worker conditions that there could indeed be hazards involved.

I emphasize plant worker conditions because you have to segregate those from the circumstances where Federal workers would be involved. Our circumstances were indirect usage of products, for instance, in shipyard work, rather than in plant facilities where there would be a much higher concentration of dust.

Senator NICKLES. In the shipyards in World War II that the Government was contracting, did the Government know that there were potential harmful effects of asbestos for the workers?

Mr. VANCE. For those workers involved in those circumstances, there really was not knowledge. That was the indirect exposure by the use of products containing asbestos. There may have been suspicion, but there was not knowledge that in those kinds of circumstances there was a hazard involved.

Senator NICKLES. You are saying the Government did not know it at that time?

Mr. VANCE. The Government did not know it, but in those kinds of uses the Government did set a standard, the Navy did, after the 1938 study. I believe in 1941 or 1942, the Navy set a standard of some five million particles of dust per cubic foot of dust, which was quite a low standard at that time. The Government did all that it could to ferret out situations where that standard was exceeded and to enforce that standard.

Senator NICKLES. Some manufacturers have suggested that during World War II, the Government required that asbestos products be used in shipbuilding and other military applications. Further, they said that the Government required them to manufacture asbestos products under a threat of Government sanctions.

Are those statements true?

Mr. VANCE. Let me read briefly from a letter that I think you will find responsive to that question. This letter is dated in 1909, long prior to World War II, to the civil engineer, U.S. Navy Yard, Norfolk, VA, from H.W. Johns-Manville Co.

Just to read a few paragraphs to show you from where the development in the use of asbestos may have come: "Sir, we respectfully beg to invite your attention to our nigrate asbestos fire-proof insulation for preventing fires due to short-circuiting or arching between adjacent cables. We might add that we have supplied the U.S. Navy Yard, Brooklyn, NY, several thousand feet of nigrate for insulation of cables and tunnels, and its use has proven all that we claimed for it. Samples and further information will gladly be furnished on request.

"We would appreciate your advices as to whether conditions warrant the use of nigrate, and awaiting your reply with interest, we remain"—signed by the person responsible, I am sure, for that account.

There are those and other letters that show clearly that the Government was a customer. The development of asbestos was not by the United States. It was purchased as a commercially available product by the Government.

It was, in fact, a very useful fire-proofing material, and it became a widely used product in fire-proofing aboard ships. The Government, in fact, wrote its specifications later to conform to specifications for the commercially available product.

Senator NICKLES. They were part of the specs that the Government required for the ships which were built in World War II?

Mr. VANCE. They would be, their having conformed to that product to have its usage, yes.

Senator NICKLES. How many workers have sued the United States for exposure to asbestos?

Mr. VANCE. Direct suits by workers as plaintiffs against the United States are approximately 80.

Senator NICKLES. And is that being a codefendant?

Mr. VANCE. There may be codefendant types of circumstances, but those are the only direct suits by plaintiffs against the United States, approximately 80.

Senator NICKLES. Are there many others where the United States is one of several defendants?

Mr. VANCE. There are many cases where we might be one of several parties as defendants or we may be third-party defendants. Altogether, there are some 2,000 suits involving the United States as a defendant or third-party defendant party.

Senator NICKLES. How many asbestos manufacturers or insurers have sued the United States?

Mr. VANCE. Insurance companies?

Senator NICKLES. Yes, or manufacturers.

Mr. VANCE. There are no insurance companies who have sued directly against the United States, and there are 8 to 10 manufacturers that have brought litigation against the United States.

Senator NICKLES. Has the United States settled on any of these cases?

Mr. VANCE. The United States settled in an asbestos case in Tyler, TX., in the late 1970's—a settlement that did not happen on my watch. I think that settlement was ill-advised, and lacked foresight.

Senator NICKLES. The only settlement was the Tyler, TX, case?

Mr. VANCE. That is correct.

Senator NICKLES. What year?

Mr. VANCE. I believe it was 1978.

Senator NICKLES. Do you know how much the settlement was for?

Mr. VANCE. Something over $5 million.

Senator NICKLES. And how many claimants were there?

Mr. VANCE. 480.

Senator NICKLES. How many Federal employees are working in asbestos litigation in the Justice Department?

Mr. VANCE. I have 35 attorneys who are doing specifically asbestos-related litigation.

Senator NICKLES. Mr. Vance, basically your position and that of the Justice Department is that the U.S. Government has no responsibility or no participation in the settlement of these cases?

Mr. VANCE. Based on what we have been able to find by thorough, and continuing research into millions and millions of documents, and based on the legal research and the legal standards that exist today, I find no legal or equitable reason for the United States to participate in settlements of these cases or in a compensation program.

Senator NICKLES. Has the administration taken a position on any legislation where the United States would have a percentage or potential financial burden?

Mr. VANCE. Regarding asbestos?

Senator NICKLES. Regarding asbestos.

Mr. VANCE. No, Senator, I do not believe that we have.

Senator NICKLES. Have you reviewed any of the various proposals that are floating around?

Mr. VANCE. When those proposals evolve and become available, we certainly do look at them, yes.

Senator NICKLES. Have you looked at the Miller bill?

Mr. VANCE. Yes, we certainly have.

Senator NICKLES. Are you in support of it?

Mr. VANCE. We have not taken a position on the Miller bill. The Miller bill, as I understand it, does not require Federal compensation, and having gotten over that hurdle, some such program as that might be appropriate.

Senator NICKLES. Senator Riegle, do you have any comments?

Senator RIEGLE. Yes, Mr. Chairman. First of all, I have an opening statement that I will not deliver at this point. I would ask that it be made a part of the record at the appropriate point.

Senator NICKLES. Certainly.

Senator RIEGLE. Second, I think that I am expressing a personal view; we are all part of the Government, those of us that belong to the Government. I think we do have some obligation here. When the Government exposes workers and other citizens, to substances that might pose harm to them, I think it should bear as much responsibility as any private entity.

Or if we are negligent or just not diligent enough in discovering workplace hazards that may be associated with Government work, then we bear an obligation to carry some responsibility for meeting the problems that arise.

I think that is as true today, tomorrow, or next week as it would have been true in shipyards in the past if, in fact, we have put workers in hazardous circumstances and they have ended up with severe medical problems.

I just do not accept the notion that the Government ought to be measured by a different standard than a private company or anyone else. I make that statement in my own behalf because I think it is important to make clear that there are different points of view on this.

The question of deciding exactly what the split is on liability between the Government and a private manufacturer that supplies an item to the Government which the Government then uses in its own work process and with its own workers is an open question that can be decided.

But the notion that the Government somehow can walk away with clean hands after having been involved in a material way in a process that causes unusual medical problems for people—that just does not wash.

As a matter of fact, the Government ought to exercise a very high standard of caution when using any items that we suspect may be dangerous to the health of the people involved.

Agent orange is a clear case. I think any of the Government officials who made the decisions to use agent orange, when there was medical evidence or suspicion that this was going to cause severe difficulty and health problems, bear an enormous responsibility. I think the Government carries the liability, including the financial liability, as a result of those decisions.

It is just as true in the nuclear tests. It is just as true in cases where workplace hazards have been created knowingly or through carelessness and have resulted in material health problems.

So there is at least that body of opinion that some of us hold here in the Senate. Certainly, it is the view that I would hold.

Let me address this question, if I may, Mr. Vance. You note, for example, that American taxpayers already bear the costs associated with asbestos-related diseases, specifically in the form of social security disability and medicaid payments.

I am wondering if you can explain how occupational disease victims end up on social security disability and on Medicaid rolls when alternatives such as workers' compensation and product liability suits exist to compensate them.

Mr. VANCE. Not being thoroughly familiar with the mechanisms of those programs I do not feel prepared to specifically address that question. I would be glad to supplement my response, for the record however.

Senator RIEGLE. If there are remedies via workers' compensation and product liability suits, why do we see people ending up on social security disability and receiving benefits under Medicaid? That seems to suggest that the Government bears responsibility for these costs.

Do you have any thoughts on this?

Mr. VANCE. I do not think that you would have Social Security involvement in those situations, where we are dealing with FECA and Government-related Longshoremen and Harborworkers' Act cases. Though that would still be a Federal cost, it would be in the Federal Government's own workmen's compensation area.

There may be other State-funded workmen's compensation programs that would be taking care of asbestos-related injuries that would not show up in social security, but FECA costs for this, I believe, are probably enormous, as would be other programs funded by the Government directly.

Senator RIEGLE. Well, take a look at it and if you can elaborate for the record, I would like you to do so.

We all know how serious the problem of occupational disease is, and you note that the administration is hesitant to endorse a sweeping legislative solution to this problem. What type of solution does the administration support?

Mr. VANCE. We do not have a particular solution that we support at this time, except to say that we would oppose a solution that has the Federal Government providing compensation and providing the money for it.

We have not identified a particular proposal that we would endorse. We are spending a good deal of time trying to collect as much data about the entire area and trying to look at it in its enormous whole in order to come to some kind of solution or to come to some position where we might be able to support a proposal. We do not have a particular proposal at this time, however.

Senator RIEGLE. Is it the administration's sense that occupational disease is a serious problem?

Mr. VANCE. Occupational disease certainly is a serious problem. So are all diseases, however.

Senator RIEGLE. Well, the concern that I have is that the administration sees it on the one hand as a serious problem, and yet does not have a proposal to deal with it. I could understand that if, we were at the end of the first year of the administration, but we are approaching the end of the fourth year. I think the time has come for you to have a recommendation.

I do not think it is sufficient for the administration to appear and say, Here is a serious problem and we do not think it ought to be solved this way, but we really do not have any idea how it should be solved.

Mr. VANCE. We have looked at each proposal that has come up. We have tried to address those proposals. We have studied those proposals. We have people trying to study all aspects of this. We feel that there should be great reluctance in approaching this thing on a piecemeal basis and have been hesitant to approach it in that way.

But we are spending a great deal of time to try to study it as a whole and to reach a point where there can be a good and comprehensive, pointed solution.

Senator RIEGLE. Well, when are we likely to hear that? When is the administration likely to make such a recommendation?

Mr. VANCE. I do not have a schedule for you, Senator.

Senator RIEGLE. Has that question been asked? I mean, who would have to provide that answer? Is there someone up the chain of command that you work with that——

Mr. VANCE. There is always someone up the chain of command, but I do not have the answer and I will not promise you that the next man up has the answer.

Senator RIEGLE. Has it been discussed? Have you raised the issue? Have you tried yourself to force the policymakers to some kind of a judgment as to a policy here?

Mr. VANCE. I have not tried to force someone to some kind of decision. I would not want to say it that way. I have certainly discussed this thing practically day in and day out with many people, and there are many people in the administration who are doing this very much from a policy standpoint.

Senator RIEGLE. So are we likely to see a recommendation, would you say, in the next 90 days or so? What can we anticipate?

Mr. VANCE. I certainly would not want to put a 90-day timetable on something as comprehensive and difficult and complex as this.

Senator RIEGLE. Let me make a suggestion to you. I think there is a burden that goes with governance. You know, the administration is in power as previous administrations have been. I do not think party has anything to do with it, but I think there is a burden of responsibility that goes with the executive branch of Government.

When you have a serious national problem, and one that you clearly acknowledge is a serious national problem, and are not satisfied with the remedies that others are suggesting, I think it logically follows that you then have to meet the burden of recommending what you think should be done.

I do not think it is enough to sidestep the problem. I do not think it is enough to just continue to shuffle papers and have people talk about it without doing something about it. There is an affirmative burden that passes to whichever administration is in power to step up to the problems that they say are there.

So if you come in here and say that this is a serious national problem, I think you have a corresponding obligation to suggest how it ought to be dealt with.

Mr. VANCE. I have not heard anything I disagree with. I would not want to say that we are not doing anything about it. In fact, we are doing something about it, but I will not tell you that the answer is going to be here in 90 days.

Senator RIEGLE. Well, when can we expect some kind of a recommendation?

Mr. VANCE. I cannot give you a specific date on a recommendation.

Senator RIEGLE. Is it likely to be this year?

Mr. VANCE. I could not tell you exactly what kind of date, Senator. There is an enormous amount of research and data and problems involved. This is a very complex area.

Senator RIEGLE. Well, when you say that you have talked to other policymakers about this, is there no timetable at all that you are aware of to try to come to a conclusion? I mean, do the meetings just go on endlessly? If you folks are reelected, will you be back here 4 years from now still pondering this thing?

I think you owe us more than that. You owe the public more than that, and I think you have to be more specific. I am not trying to pin you to 90 days. You tell me when you can come back, but I do not think it is enough to say that there is a major problem. We do not like what others are proposing, we do not have any answers ourselves, we do not have any timetable to give you an answer, and we do not have any idea when we are going to come back and make a proposal ourselves.

Mr. VANCE. I would not characterize the responses exactly like all of those things. We are trying to find the answer and there are proposals that have been made that we do not necessarily oppose. We meet with groups from the Hill, we meet with groups in industry, we meet with individuals whenever there is an opportunity to do so and there might be meaningful discussions leading toward a resolution of the matter, and we will continue to do that.

However, I cannot provide a specific time for the presentation of a specific, comprehensive proposal, I cannot give you that. I can tell you that we will go on as intensively as we possibly can studying these very difficult issues.

Senator RIEGLE. See, that is what the American people are fed up with, frankly. That is one of the reasons Carter was thrown out. There was a sense that the Government was studying this, studying that, considering this, pondering that, weighing this, and weighing that, but was unable to act. It was unable to reach decisions and was unable to deal in an effective way with problems.

That was the perception, and it seems to me that is precisely what you are giving us here today. You are saying that even though everybody has agonized about this and you have a large staff working on it, a lot of money is being spent on this problem, studies are being done, and staff meetings are taking place.

Yet, you do not have the foggiest idea of what you think ought to be done. You know what you do not want to see done, but you do not have an affirmative response. You do not have a timetable to get to an affirmative response, and basically you leave us hanging in the wind. I think you leave the public hanging because you owe them something more than that.

They are not paying you to let this problem sail on indefinitely. They are paying you and giving you the responsibility to come up with some recommendations, and I think there is an obligation to do that. It goes right up to the President and then right back down to yourself.

I would hope that you would go out and bring this problem to some kind of a conclusion, and come back here within a reasonable time—2 months, 3 months, 4 months—with a recommendation. That is what the country wants and you owe it to them.

Mr. VANCE. I agree with that, and that is exactly the end that I hope that we can work toward.

Senator NICKLES. Thank you, Senator Riegle.

Senator RIEGLE. I have other questions for the record that I would like to submit to the witness.

Senator NICKLES. Certainly.

You may not be aware that the Wellington Group has been working on this for about a year and a half and have basically come up with, what I would call, a non-Federal solution or a private solution. There are many of us who would like to see this solved, and not necessarily with a Federal solution, particularly with Federal dollars involved, if possible.

It is an extremely difficult problem and one that cannot be solved in a short period of time.

I am hopeful that the Wellington solution will have some merit and be fairly well accepted.

Thank you very much, gentlemen, for your responsiveness.

Senator RIEGLE. Thank you.

Mr. VANCE. Thank you, Mr. Chairman.

Senator NICKLES. Our next panelist is G. Earl Parker, senior vice president of the Manville Corp. Mr. Parker, please proceed.

STATEMENT OF G. EARL PARKER, SENIOR VICE PRESIDENT, LAW AND PUBLIC AFFAIRS, MANVILLE CORP., ACCOMPANIED BY DENNIS MARKUSSON, ASSISTANT CORPORATE COUNSEL, AND JOHN LONNQUIST, DIRECTOR, PUBLIC AFFAIRS.

Mr. PARKER. Thank you, Mr. Chairman. My name is Earl Parker and I am senior vice president and a member of the board of directors of Manville Corp. Accompanying me this morning on my right is Dennis Markusson, assistant corporate counsel, and on my left John Lonnquist, who is director of our public affairs office in Washington.

Mr. Chairman, it requires commitment, courage and compassion to make decisions involving both human lives and money. But as a society, we have the greatest responsibility to confront and deal fairly with just such decisions.

Overexposure to asbestos and its legacy of effects on health is one of society's pressing problems. For many years, asbestos has given our society enormous benefits, sparing millions of men, women and children who, without its protection, would have been killed or maimed by fire.

Without asbestos insulation, the vast allied armadas of the Second World War could not have delivered warriors, munitions and supplies to the European and Asian theaters. But we now know that the workers who produced or installed those asbestos safety products sometimes suffered tragic damage to their health decades later.

The decision to be made by this committee and the Congress is how should these unfortunate victims of that exposure be fairly compensated.

My written statement covers many facets of the asbestos disease tragedy and the impact that our institutions, such as Federal Government, had on that tragedy. In the time available to the subcommittee this morning, I would like to focus on three points.

The first is that present tort litigation can satisfy few of the asbestos claimants. The chart of my left, which is reproduced on page 23 of my written testimony, illustrates why. It depicts Manville's experience in resolving all 4,130 asbestos health claims that were resolved by Manville prior to our chapter 11 filing.

The left side of the chart illustrates the wide range of payments we encountered. It graphically exposes the myth that asbestos litigation is a fair and proper way to provide compensation.

Over half of the 4,130 claims—57.9 percent, to be precise—resulted in awards of less than $10,000 each. Now, that is the payment to a victim before he turns over 30 to 40 percent to his attorney and pays other expenses.

Twenty-one percent of the claims resulted in absolutely no award, and the single largest group of claims fell into the $5,000 to $10,000 range. The median recovery from Manville was $7,500. After lawyers' fees, that leaves a median net award to the claimant of $4,500. In other words, fully 50 percent of claimants actually received less than $4,500 from Manville.

In addition to marginal, uneven compensation and high transaction costs, there are the added delays and great uncertainty inherent in court litigation.

The figures on the right side of the chart are even more revealing. They show that a handful of claimants hit it big, while the majority came away with relatively little.

Let us look at the upper levels of compensation awards. Less than 1 percent of all claimants received over 21 percent of all the compensation dollars Manville paid. Fewer than one-quarter of the claimants received more than three-quarters of all the money Manville paid.

This skewed distribution points out what we all know: asbestos tort litigation will benefit only the few. Indeed, the only consistent winners are the lawyers. Applying the Rand Corp. figures of $64,000 per case average settlement to the 27,000 cases now pending, it is easy to calculate that plaintiffs' lawyers stand to receive $731 million from this tragedy. It is obscene to make multimillionaires of this elite group while injured workers receive little.

The very existence of the private companies is threatened and no compensation program can succeed unless the ability of the responsible companies to earn is preserved.

The broad discrepancy in compensation payments might be understood if the larger payments were received by those most seriously injured. That is not the case. Numerous witnesses before this committee, including Dr. Wheeler and Dr. Jones, have testified that at present there is little correlation between the severity of disease and the compensation awarded by the courts. We also know this to be true.

Our experience with asbestos litigation dramatizes the massive inequities built into the adversarial process. This is a large-scale, multiple-claim problem. We as a society simply must find a more rational and fair method, a less costly method, to deliver compensation.

The only fair and sensible thing to do is to channel our resources and energies into a balanced statutory compensation program which will protect and provide for all, not just the few. That is the second point I wish to make this morning.

A legislative system of compensation should be based on the same philosophy which underlies workers' compensation. That approach gives the worker a prompt, no-fault recovery in defined amounts and minimizes wasteful transaction costs. It treats similarly injured workers in a uniform manner based on objective medical findings, and it provides a predictable, affordable system to finance the compensation.

We would propose a legislative concept that reaffirms the basic tenets of workers' compensation. We would extend this traditional philosophy in the case of asbestos beyond the employer and include the product manufacturer and the Federal Government. Including the Government recognizes the distinct role that the Government has played in the asbestos tragedy, and that is the third point I wish to explore with the Subcommittee this morning—the Federal Government's responsibility to be a full participant in legislation to fairly compensate asbestos disease victims.

The incontrovertible fact is that the Government, through the U.S. Navy, knowingly caused thousands of workers under its control to be overexposed to asbestos. About one-half of all pending claims involve workers from Government shipyards.

The facts being uncovered in the Government's own archives and record centers prove that the government of the United States from the 1930's through the 1970's was consistently negligent in its handling of asbestos products.

Simple fairness dictates that the Federal Government must no longer be permitted to slough off its responsibilities to asbestos victims. The cost of the Government's own misconduct must not be allowed to destroy private companies and deprive victims of a comprehensive solution.

To suggest that the dominant player in the asbestos tragedy has no role to play in the solution is unthinkable. In the case of asbestos, there is every reason to judge the government by the same standards that private companies are judged.

Again, we do not suggest that the Federal Government bear a responsibility in place of the private sector. Rather we contend only that the United States must participate in a legislated remedy along with private companies in an amount commensurate with its negligent actions.

Government negligence is beyond debate. My written statement documents thoroughly, using the Government's own records, that it was fully aware of the potential risks associated with excessive exposure to asbestos. In its answers to pending lawsuits, the Government has admitted knowledge of the dangers of overexposure to asbestos.

It was the U.S. Public Health Service which, in 1938, published its own study advancing a safe level of asbestos exposure below which no new cases of asbestosis would be anticipated.

Tragically, the Federal Government's handling of asbestos products did not measure up to its knowledge of the risk. In 1941, the commander of the U.S. Navy's Division of Preventive Medicine wrote to the Surgeon General: "Asbestosis. We are having a considerable amount of work done in asbestos, and from my observations I am certain that we are not protecting the men as we should. This is a matter of official report from several of our Navy yards."

An internal report of an asbestos health survey from 1942 regarding the Bath Iron Works Shipyard in Maine states: "The conditions in this shop present a very real asbestos hazard." Yet, returning to the same shipyard for a follow-up inspection a little more than 2 years later, dust counts were measured at between 34 million and 52 million particles per cubic foot. That was between 6 and 10 times higher than the Government's own 1938 recommended standard. With dust counts this high, it is clear that the Federal Government knew it was courting a potential occupational disease catastrophe.

The Government allowed asbestos to harm not only workers it controlled in shipyards, but many thousands more. In 1946 the Government misled science, medicine, and industry into believing that use of asbestos in shipyards did not generate hazardous levels of exposure.

In that year, the Navy permitted publication of a wartime survey of workers who had been exposed to asbestos in four Navy and Navy-contract shipyards. This report represented to the public and to asbestos manufacturers that shipyard insulation work was not a dangerous occupation.

Yet, a similar survey conducted by the same two men 2 years earlier was classified and passed into the Navy's files. That earlier report, which was concealed from science, industry, and the public, had found asbestos-related lung changes in one-third of the shipyard workers studied; one-sixth of those studied in the earlier report had been diagnosed as having asbestosis.

Revelation of this data in 1946 might have changed the entire course of medical investigation if it had been released. Concealment meant that almost two decades would pass before Dr. Selikoff sounded the alarm.

World War II was, of course, a national emergency, but the Federal Government's failure to limit asbestos exposures in the workplace it controlled continued for many years after World War II.

Indeed, a recently discovered Navy document dated 1978 talks about the need at that late date to implement an asbestos control and medical monitoring program. The letter displays the fear that the media would rake the Navy over the coals for their years of negligent handling of asbestos in the shipyards.

In fact, such abuses continued as recently as 1983, according to testimony taken last year before the House Subcommittee on Manpower and Housing. Despite this demonstrated neglect, it is the private sector that will be held accountable under our present system for the Navy's failure to enforce good health and safety programs in its workplaces.

Surely, any just compensation system must place a fair burden on all those who were best able to prevent injuries, and in this case that clearly includes the Government.

Mr. Chairman, only Congress can address the complex and painful issues which have arisen in the asbestos cases. To make sure that all present and future asbestos victims will be compensated, we must find a fairer way for both the injured workers and the parties who should contribute to their compensation than is possible under tort litigation.

We believe that a federally legislated compensation program is the most appropriate course of action for Congress to pursue. Litigation has proved neither swift nor just, but rather has made victims out of both the workers and the defendant companies. Both groups urgently need legislation which would allow an honorable resolution of this tragic situation.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Parker and responses to questions submitted by Senator Nickles follow:]

TESTIMONY OF

G. EARL PARKER
SENIOR VICE PRESIDENT
MANVILLE CORPORATION

BEFORE

THE SUBCOMMITTEE ON LABOR OF THE
COMMITTEE ON LABOR AND HUMAN RESOURCES
UNITED STATES SENATE
MAY 21, 1984

Good morning, Mr. Chairman. My name is Earl Parker and I am Senior Vice President, Law and Public Affairs, as well as a member of the Board of Directors, for the Manville Corporation. Accompanying me this morning are Mr. Dennis Markusson, Assistant Corporate Counsel, and Mr. John Lonnquist, Director of Public Affairs, for the company.

Mr. Chairman, Manville commends you and the entire Subcommittee for initiating this series of hearings on the issues of occupational disease compensation, with particular emphasis on asbestos-related injuries. Consideration of a legislated compensation program for workers injured by asbestos is not a new subject. The first such proposal was introduced in the Congress in 1973, over a decade ago, and my own company's involvement dates back almost as far, to 1975. The authors of these early proposals answered the fundamental question which you face again today: is it society's desire to argue the question of fault in the asbestos tragedy, or instead is it our collective desire to see that all of the victims of asbestos-disease receive compensation for their injuries.

The two goals are really mutually exclusive. If determinations of legal fault remain the predominant concern, then continued reliance on tort litigation may be appropriate. Let us recognize, however, that the "costs" of this choice are severe: logjammed courtrooms; enormous transaction costs and litigation expenses; disparate treatment of similarly injured workers, including no compensation to many who are legitimately injured; and potential financial ruin for a portion of the nation's industrial community.

If instead society aspires to ensure that asbestos victims as a class are compensated fairly, then the fault-based tort system is not an acceptable way to realize this goal, for reasons witnesses at the Subcommittee's earlier hearings have articulated.

The testimony this Subcommittee received at the April 24 and April 30 hearings reflects substantial agreement among the witnesses on several important facts, and except in passing we do not intend this morning to go over that ground again. We are encouraged that all of the witnesses at the previous hearings have seemed to reach the same conclusion. If our goal is to reasonably compensate persons injured by asbestos, existing institutions, particularly in the tort litigation arena, are functioning neither fairly nor adequately, nor in a manner consistent with our medical understanding and our societal needs.

Doctors Nicholson, Wheeler, and Jones, for instance, testified collectively that asbestos can cause disabling disease or death; that a substantial number of asbestos-disease cases may be expected to occur over the next several decades; and that using appropriate medical criteria, these diseases and the impairment they may cause can be diagnosed with a high degree of certainty. But these witnesses also agree that the tort system does not render judgments based on medical evidence. As a result, the tort system can impose heavy liability not only in those instances where a plaintiff establishes a legitimate asbestos-related injury, but also in cases where there is absolutely no disability, where the injury is not necessarily related to asbestos exposure, or where the injury is purely prospective in nature.

Mr. Baron and Dr. Kakalik both testified that the tort system is grossly inefficient; that billions of dollars have been spent but little more than one-quarter of that amount has ever reached the injured workers themselves. As a disinterested recorder of fact, Dr. Kakalik refrained from assuming the mantle of an advocate for any particular remedial action. As one with a direct financial interest in the continuation of asbestos litigation, Mr. Baron was not so shy. He suggests, in effect, that IF an agreement or settlement with our insurers can be reached and IF supplementary agreements can be implemented to streamline tort procedures, then defendant transaction costs should drop and we should no longer concern ourselves with the fact that the plaintiff's bar will continue to siphon off 40 percent or more of awards. Nor, apparently, would Mr. Baron have us concern ourselves that inherent to the present tort system, significant numbers of victims will still receive little or no compensation, even if the medical evidence supports the validity of their occupational disease claims.

Other witnesses at the Subcommittee's April 24 and April 30 hearings offered equally informative and persuasive testimony. The common thread that one finds in each of the witnesses' statements comes down to this: a recognition that there is a real problem with respect to asbestos tort litigation - for claimants and defendants alike - and that some changes are necessary and inevitible if we are to fairly resolve one of American society's unprecedented and complicated issues.

How did we arrive at the point that asbestos personal injury claims - claims that overwhelmingly arise out of the workplace - are so prevalent in the tort system? To completely answer that question it is necessary to review the impact on the asbestos industry by the medical, legal, scientific and manufacturing communities along with the federal government.

As you know, asbestos is a naturally occurring mineral in the earth's crust. Because of wind erosion, it has been, to a minor degree, suspended in the atmosphere for millions of years. Thus, asbestos has been breathed by essentially every member of the human race as well as our evolutionary predecessors. Each of us in this room is now breathing a few asbestos fibers which our body's natural defenses -- notably the mucous system -- will normally cleanse from our lungs.

For at least a thousand years asbestos had been known as a truly remarkable material. A single fiber possesses incredible tensile strength, and the material is both heat and acid resistant. In fact it was the use of asbestos earlier in this century that led to the coining of a new phrase in the English language, "fire-proof." These properties led asbestos to be used in literally thousands of products, and without question many of these applications saved millions of lives. To this day, no truly satisfactory substitute material has been found for some of these uses. And for many decades, Manville subsidiaries included in their product lines manufactured goods composed of varying amounts of asbestos fiber. Like many defendants in the asbestos litigation, Manville today neither mines asbestos fiber nor manufactures friable asbestos-containing products, having divested itself of the last vestiges of these businesses during the past two years.

In the early part of the 20th century, it was learned that a few workers in factories producing asbestos textile products in England and who had been exposed to heavy concentrations of pure asbestos dust over long periods of time developed a scarring of their lung tissue -- a condition which, in the 1920's, came to be called "asbestosis." At that time, Manville, one other large manufacturer of asbestos products and, importantly, our insurer, Metropolitan Life Insurance Company, commissioned studies at an independent medical research laboratory to determine whether there was any potential asbestos-health problem in American factories, and if so to learn how to use asbestos more safely. Since thousands of workers already had been occupationally exposed to pure asbestos, but had not contracted asbestosis, it was reasoned that there must be some level of exposure below which scarring of the lung tissues would not occur.

The U.S. Public Health Service and its counterpart in Canada participated in review of these studies, and they were published by the Public Health Service in January, 1935. Further, the U.S.P.H.S. subsequently initiated its own independent studies of asbestos and in 1938 published a recommended dust level standard of five million particles per cubic foot (5 mppcf). Manville used the technology then available to reduce dust levels within its factories to meet that recommended standard. As Dr. Nicholson testified last year before a House subcommittee, 175,000 fewer asbestos-related deaths would be projected if all parties, notably the federal government, had adhered to the 5 mppcf standard as well.

During this period it was believed that persons working with finished products containing asbestos were in no particular danger of asbestos injury. This is because asbestosis, like many other diseases, is dose-response related (i.e., to contract asbestosis, one must receive a sufficiently large exposure over an extended period of time). Since most of the finished products contained only small amounts of asbestos fiber, it was reasoned that the dose of exposure to these goods would clearly be less severe than the exposures to 100% raw asbestos fiber in the manufacturing process. Since the persons working with finished products were not continuously exposed throughout their workday, it was further reasoned that the duration of exposure also would be less than that of an asbestos factory worker. Hence, it was thought, installers and applicators of finished asbestos products would not be at risk of exposure above the Public Health Service's recommended standard. This belief was apparently confirmed by U.S. government research on the uses of asbestos-containing thermal insulation materials in naval shipyards. That research -- the so-called Fleischer-Drinker Report -- was published in 1946 and concluded that "[asbestos] pipecovering work is not a dangerous occupation."

It was not until the 1964 release of Dr. Irving Selikoff's research that it was demonstrated that previous scientific conclusions on exposure levels and associated risks were wrong, and that use of products containing even small amounts of asbestos could pose a disease risk in uncontrolled, dusty environments. Based on the medical literature prior to that time, we simply had no reason to suspect that product users were at risk, a view confirmed by Selikoff in a 1970 issue of Industrial Medicine journal. In describing the Insulation Industry Hygiene Research Program, an effort begun in 1968 and sponsored jointly by Manville, the Asbestos Workers Union, and Mt. Sinai Hospital, Dr. Selikoff observed:

> In the asbestos mining and manufacturing industry, the risk of heavy exposure to the occupational dusts had been recognized for some years. And this primary industry has understood the need to install ventilation systems and other dust control devices to reduce the hazard. Experience had indicated that reduction of dust levels and exposures could result in a greatly improved health experience among asbestos factory workers.
>
> But the extrapolation of that experience to another classification of workers - specifically those who fabricate and install insulating materials - was a more sophisticated task for clinical medicine and epidemiology.

In short, the science simply wasn't available before the 1960's to support a conclusion that asbestos product users were at any risk. In the same article cited above, Selikoff placed the problem in perspective:

> It is too easy to indulge in what might be called the demonological theory of industrial hygiene history. One version would place the responsibility for early identification of risk and its correction upon industry and then indict it for trading human health for profits. Similarly, the other side of this counterfeit coin puts the blame on organized labor for having been more interested in premium pay for hazardous work than in eliminating known hazards. Both conclusions are too convenient and are essentially erroneous. It is much nearer the truth to say that both industry and labor shared in ignorance and neglect of the problem. Science and medicine are also at

> fault here for inadequate attention to environmental and occupational health.

With the new knowledge resulting from Selikoff's 1964 study came radical changes in industry's approach to, and uses of asbestos. Warning labels for asbestos products were instituted, first by Johns-Manville, then others in the private sector, and finally, in the 1970's, by the federal government. Health seminars were offered to educate customers. And where asbestos release could not be controlled, products were voluntarily removed from the marketplace. But for the many thousands exposed before Selikoff's work, albeit oftentimes within scientifically accepted standards of the time, protection from asbestos injury could not be made retroactive.

As a society, we decided long ago that work-related injuries should be compensated on a no-fault basis. That is the function of workers' compensation. But for long-latent disease victims, workers' compensation has several imperfections which may operate to deprive the worker of his or her benefits. Inappropriate statutes of limitations, benefit levels based on wages at the time of last exposure, and similar deficiencies sometimes have made workers' compensation much less effective for victims of latent occupational disease than is the case with traumatic injuries. Today, these system deficiencies are being addressed and resolved, and workers' compensation upgraded, in so far as occupational disease coverage is concerned. But so long as an additional, unlimited, recovery is possible through tort litigation, we do not believe that these workers' compensation improvements alone will yield any reduction in the volume of asbestos litigation activity.

Our inattention to workers' compensation system problems these past 15-20 years did not go unnoticed. The courts have intervened. But rather than reform the workers' compensation system to make it more responsive to the needs of occupational disease claimants, the courts instead allowed workers to bypass workers' compensation remedies and pursue relief in tort litigation. One of the better summaries of the evolving tort law and how it has impacted long-latent asbestos injuries was written by Richard Epstein, a law professor at the University of Chicago, and printed by the American Enterprise Institute. With your permission, Mr. Chairman, I include that article with my testimony and ask that it be made part of the formal hearing record.

The courts' receptivity to asbestos cases is undoubtedly borne out of human compassion to ensure that injured persons are able to obtain compensation. But in the larger sense, this is but one more step in a revolution that has besieged our country's legal systems and the ways in which it deals with latent toxic injuries. Like most revolutions, it started modestly, but now threatens to grow out of control. Like most revolutions, it sprang from noble reasons to correct perceived injustices, but has resulted in causing additional injuries. And like many revolutions, continued reliance on the tort system, even with increasingly liberalized burdens of proof, is doomed to failure as a means for compensating occupational disease victims because these changes address only symptoms, not causes.

For workers occupationally exposed to asbestos, the most important legal development took place in 1973. At that time, an appellate court held that workers injured by asbestos could seek compensation through third-party litigation against asbestos product manufacturers, and that there would be no limits on the amount of recovery these workers could realize.

As a result, the controlling philosophy of workers' compensation -- no-fault recovery for workers, but in defined amounts -- has broken down. In its place we find dual systems: one, workers' compensation, for the person injured on the job where no product can be identified "at fault;" and the second, tort litigation, where a worker injured on the job by some product may seek an unlimited, jackpot recovery.

With that broad historical perspective, let me turn now to precisely what has transpired in the asbestos cases. I wish to make clear that while many other asbestos tort defendants could likely offer similar testimony, the specific data that I cite reflects Manville's experience and history. Briefly, the data presented corrects two common misperceptions about the asbestos tragedy. First, only about one-third of all plaintiffs ever worked for an asbestos manufacturer -- this is not a case where our own employees make up the bulk of the injured parties. Second, the actual recovery received by most plaintiffs is erratic and unpredictable, with a gross median claim value of $7,500, exclusive of payments from any other defendent.

As of August 26, 1982 - the date on which Manville filed petitions under Chapter 11 of the Bankruptcy Code - the company had disposed of 4,130 asbestos-health claims. Of these, 3,570 (or 86 percent) were disposed during calendar years 1980, 1981, and 1982 through August 26. Disposition was by settlement, trials and dismissals (e.g., voluntary, statute of limitations, summary judgments). Of the 4,130 disposed cases, over 3,100 were disposed of through negotiated settlements; the balance were disposed of through dismissals or trials, with Manville prevailing in over 40 percent of the latter.

In addition to the broad data base provided by these disposed claims, there are 17,127 asbestos-health claims currently pending against the company throughout the United States. Moreover, we are advised that since August 26, 1982 there have been more than 10,000 additional asbestos-health suits filed in various courts to which Manville in all probability would have been a party defendant but for the Chapter 11 proceeding. We do anticipate that virtually all of these cases will be presented as claims in our Chapter 11 proceeeding.

The chart on the following page depicts the various worker categories for all disposed and pending claims. The story told by the chart is important, as it belies the notion that somehow the asbestos "problem" derives mostly from workers exposed in asbestos manufacturing facilities. This is simply not the case and, frankly, speaks well of the primary asbestos industry's efforts - in Manville's case beginning in 1929 - to provide a safe workplace for its employees.

ASBESTOS TORT CLAIMS, BY SOURCE OF EXPOSURE

WORKER CLASS	DISPOSED CLAIMS ALL YEARS CLAIMS: NUMBER & PERCENT	DISPOSED CLAIMS THREE YEARS 1980, 1981, 1982 CLAIMS: NUMBER & PERCENT	PENDING CLAIMS CLAIMS: NUMBER & PERCENT
All	4130 (100%)	3570 (100%)	17127 (100%)
Factory Workers (Non-Manville)	1176 (28%)	1125 (32%)	1851 (11%)
Manville Factory Workers	165 (4%)	159 (5%)	1131 (7%)
Insulation Workers	1030 (25%)	695 (19%)	2235 (13%)
Shipyard Workers	1452 (35%)	1325 (37%)	8083 (47%)
Other (Classified, Unclassified, Unknown)	307 (7%)	266 (7%)	3827 (22%)

The two largest categories, insulation workers and shipyard workers, are analogous worker categories and total the same 60 percent of all prior dispositions and 60 percent of pending claims. For the years 1980-1981-1982 these categories comprised 56 percent of dispositions, again virtually identical to the analogous mix of pending claims.

What worker categories will characterize future disease claims? It is speculation, albeit informed speculation, to attempt to characterize the exposure history for a population that has not yet made any claims. But we do have some idea of what factors will come into play for this "future cases" profile.

First, as Dr. Nicholson testified, "only a small fraction of the deaths will occur in long-term heavily exposed workers. This is because of the limited number of individuals employed as insulators or in asbestos products manufacturing and the great numbers employed in the lower risk circumstances." Dr. Nicholson's testimony is consistent with the apparent views of the OSHA Advisory Committee on Construction, which believes that fully 75 percent of today's asbestos exposure occurs in the construction industry, whether through new product installation or through demolition activity in the course of which asbestos fiber from old product is released.

Similarly, we know that ship building, repair and maintenance activities will continue to present the opportunity for significant asbestos exposures into the future. As testimony last year before the House Subcommittee on Manpower and Housing revealed, naval shipyards, owned and operated by the federal government, continued in 1983 to permit asbestos exposures in excess of OSHA-mandated levels. In fact, witnesses appearing on behalf of the Navy asserted that it was under no obligation to comply with OSHA requirements, and at the time had not made any effort (as required by Executive Order 12196, dated February 26, 1980) to apply for or secure OSHA's approval of an alternative health/safety plan. It was only after several members of Congress jointly wrote to the President on this matter that the Navy even began the task of securing an exception to OSHA's strict asbestos exposure requirements.

In light of the testimony received at earlier Subcommittee hearings, it might also be instructive to review the degree of physical impairment evidenced in the pending claims, which in general is substantially less than in the previously disposed claims. While Manville does not have such data on all of the pending claims, there is sufficient medical information to support a conclusion that at least 30 percent of them exhibit no present asbestos-related physical impairment, or at worst very minimal physical impairment.

Random audits of pending claims with medical data (primarily hospital records and reports from plaintiffs' treating physicians) were undertaken in three significant jurisdictions. The results of those audits are:

Jurisdiction A

113 files audited

Pleural Plaques	13 (11.59%)
Pleural Thickening	18 (15.9%)
Pleural Disease	6 (5.3%)
No present Disease	13 (11.5%)
Chronic Obstruction	13 (11.5%)
	63 (55.7%)

Notes:

1. Pleural Plaques and pleural thickening are conditions occurring outside the lung itself and involving the pleura or chest lining. They are considered stigmata of exposure to asbestos, although pleural thickening may be caused by many other factors unrelated to asbestos. As a general rule, the medical community believes that such pleural involvement is not "asbestosis" per se and results in virtually no physical impairment.

2. Chronic Obstructive Pulmonary Disease is primarily chronic bronchitis and emphysema caused by smoking. Except in very rare circumstances, COPD is not causally related to asbestos exposure.

Jurisdiction B

114 files audited

Pleural Thickening	2 (1.7%)
No Disease	1 (0.8%)
Cases with ILO/UCC Classifications of 1/1 or less	78 (68%)
	81 (70.5%)

Notes:

ILO/UCC classifications are x-ray classifications for asbestos-related findings, and are universally accepted. It is generally accepted that classifications of 1/1 and below do not constitute x-ray evidence of asbestosis.

Jurisdiction C

150 files audited

Cancer	23 (15%)
Severe Asbestosis	4 (2.6%)
Moderate Asbestosis	14 (9%)
Mild Asbestosis	10 (7%)
No present impairment based upon pulmonary function tests or x-ray evidence	99 (66%)

These data must then be compared to our past disposition experience by major disease categories:

DISPOSED CLAIMS

All - 4130 Claims

Asbestosis	2530 (61%)
Lung Cancer	280 (7%)
Mesothelioma	244 (6%)
Pleural Plaques & Pleural Thickening	52 (1%)

1980 - 548 claims

Asbestosis	396 (72%)
Lung Cancer	39 (7%)
Mesothelioma	50 (9%)
Pleural Plaques & Pleural Thickening	1 (0.2%)

1981 - 1932 claims

Asbestosis	1037 (54%)
Lung Cancer	95 (5%)
Mesothelioma	81 (4%)
Pleural Plaques & Pleural Thickening	11 (0.6%)

1982 - 1090 claims

Asbestosis	701 (64%)
Lung Cancer	93 (8.5%)
Mesothelioma	55 (5%)
Pleural Plaques & Pleural Thickening	36 (3%)

1980-1982 Composite

Asbestosis	2134 (60%)
Lung Cancer	227 (6%)
Mesothelioma	186 (5%)
Pleural Plaques & Pleural Thickening	48 (1%)

Thus, where the disposed claims profile reflects a significant degree of real injury, the audits suggest that a different conclusion is warranted for the pending claims.

As to costs, Manville's average disposition costs (excluding the company's legal fees and expenses), reported under three different headings to reflect the various stages of the litigation process, have been:

INCLUDING CASES ON APPEAL AND PUNITIVE DAMAGES

Year	Claims	Manville Average
All	4130	$19,842
1980	548	$23,338
1981	1932	$17,912
1982	1090	$25,171
1980-82 Comp.	3570	$20,961

INCLUDING APPEALS, EXCLUDING PUNITIVE DAMAGES

Year	Claims	Manville Average
All		$18,365
1980	548	$23,338
1981	1932	$16,938
1982	1090	$21,299
1980-82 Comp.	3570	$19,252

EXCLUDING APPEALS AND PUNITIVE DAMAGES

Year	Claims	Manville Average
All		$16,601
1980	547	$21,920
1981	1899	$15,397
1982	1070	$18,057
1980-82 Comp.	3516	$17,221

Mr. Chairman, the figures listed in the preceding charts do not include our own legal fees and expenses, paid in defense of the claims. The column headed "Manville Average" is simply that: the gross sum paid to plaintiffs divided by the number of claims.

The "Manville Average" figures do include, however, plaintiff attorney fees and expenses since those costs are paid by the plaintiff out of his or her gross recovery. Assuming the RAND report ("The Costs of Asbestos Litigation") is correct, and we believe it is quite accurate, the "Manville Average" figures must be decreased by approximately 40 percent to determine the "net-to-claimant" average or the amount that a plaintiff actually takes home.

But using averaged figures does not tell the whole story of plaintiffs' experiences in the asbestos litigation. To really understand the awards experience confronting the majority of claimants, one should look more closely, using median figures as a guide. Such calculations show the uneven distribution of awards and give a point around which the majority of claims fall. We have attempted to illustrate the effect of this analysis in the chart on the following page, which merits further explanation and comment.

MANVILLE TORT DISPOSITION EXPERIENCE

					Cumulative Totals			
Disposition Amount Range	# of Plaintiffs	% of Plaintiffs	Total $	% of Total $	# of Plaintiffs	% of Plaintiffs	Total $	% of Total $
Over $1,000,000	4	00.10	$ 7,247,050	08.84	4	00.10	$ 7,247,050	08.84
$500,000 to $999,999	7	00.17	$ 4,756,173	05.81	11	00.27	$12,003,223	14.65
$250,000 to $499,999	17	00.41	$ 5,763,324	07.03	28	00.68	$17,766,547	21.68
$100,000 to $249,999	74	01.79	$11,028,927	13.46	102	02.47	$28,795,474	35.14
$ 75,000 to $ 99,999	62	01.50	$ 5,160,547	06.30	164	03.97	$33,956,021	41.43
$ 50,000 to $ 74,999	128	03.10	$ 7,680,384	09.37	292	07.07	$41,636,405	50.81
$ 40,000 to $ 49,999	137	03.32	$ 6,015,490	07.34	429	10.39	$47,651,895	58.15
$ 30,000 to $ 39,999	217	05.25	$ 7,136,643	08.71	646	15.64	$54,788,538	66.85
$ 25,000 to $ 29,999	135	03.27	$ 3,598,179	04.39	781	18.91	$58,386,717	71.25
$ 20,000 to $ 24,999	188	04.55	$ 4,114,276	05.02	969	23.46	$62,500,993	76.27
$ 15,000 to $ 19,999	376	09.10	$ 6,412,964	07.83	1,345	32.57	$68,913,957	84.09
$ 10,000 to $ 14,999	393	09.52	$ 4,574,660	05.58	1,738	42.08	$73,488,617	89.67
$ 5,000 to $ 9,999	965	23.37	$ 6,950,563	08.48	2,703	65.45	$80,439,180	98.15
$ 2,500 to $ 4,999	347	08.40	$ 1,267,885	01.55	3,050	73.85	$81,707,065	99.70
$ 1 to $ 2,499	193	04.67	$ 244,490	00.30	3,243	78.52	$81,951,555	100.00
$ 0	887	21.48	$ 0	00.00	4,130	100.00	$81,951,555	100.00

The left side of this chart illustrates the wide ranging experience in awards that we have encountered, and debunks the myth that asbestos litigation is the panacea for victims that many seem to think it is. Very few plaintiffs -- less than 4 percent -- received gross awards of $75,000 or more from Manville. In fact, over half (57.92%) of the 4,130 claims resulted in awards of less than $10,000 each and that is before subtracting plaintiff attorney fees and legal expenses. This includes the 21.48 percent of claims that received absolutely nothing.

The single largest group of claims fall into the $5,000 - $9,999 range. Overall, for all diseases and all plaintiffs combined, this yields a median gross claims value of $7,500, from which the plaintiff has yet to pay his own attorney fees and costs. Subtracting RAND's 40 percent figure used earlier yields a net-to-claimant median claim value of $4,500. In other words, when it is all said and done, historically the asbestos litigation results in plaintiffs incurring substantial delays, considerable expense, and great uncertainty in result, all to realize the sum of $4,500 from my company, which is exclusive of any recovery from other defendants.

The right side of the chart is equally damning of the tort system as a means by which to compensate workers injured by asbestos exposure. The cumulative totals reported buttress our view that inequity runs rampant through the litigation system. Less than three-quarters of one percent of all the claimants walked away with over 21 percent of all the compensation dollars Manville has paid. Less than one-quarter (23.46%) of all claimants received more than three-quarters (76.27%) of all monies paid!

Some might suggest that this skewed distribution of monies is not necessarily inappropriate -- that the more severely injured plaintiff should and does receive far more money in tort awards than does the less injured plaintiff. But the facts don't support that rosy a view in the asbestos litigation. Of all the cases reported on the chart, 244 are mesothelioma claims. I think we all could agree that this category of case -- where the plaintiff has no hope of cure or reasonable treatment, and will surely die within a very short time of diagnosis -- is the one most likely to result in substantial tort awards. And indeed, on average a plaintiff with confirmed diagnosis of mesothelioma does receive larger awards than plaintiffs alleging any of the other asbestos-related diseases.

But looking only at mesothelioma dispositions, we see great disparity in the way the tort system has dealt with these cases. Again, 244 of Manville's 4,130 dispositions involve mesothelioma claims. The actual experience:

> 22.95 percent of mesothelioma claims resulted in no award to the plaintiff.
>
> Roughly half (50.82%) of all mesothelioma claimants walked away with 95 percent of all the monies spent to compensate this class of injured worker.

In other words, 124 mesothelioma claimants shared in $14.9 million, while roughly the same number, 120 equally disabled mesothelioma plaintiffs, shared in $773,608. If you were a mesothelioma plaintiff and one of the tort system's "winners," you received on average a gross award from Manville of almost $121,000. If instead you were in the unlucky half, your mesothelioma was compensated with an average gross award of $6,447, or about one-twentieth the amount received by the tort "winner." Even if you exclude from the calculations the 56 mesothelioma claims that resulted in no award, a mesothelioma plaintiff in the unlucky group fared only slightly better -- $12,088 -- but still recovered less than one-tenth the amount of the other mesothelioma group.

In sum, our experience with asbestos litigation establishes the massive inequities and inconsistencies inherent in the adversarial process. Where one encounters a multiple tort problem such as this, with literally thousands of cases disposed or pending and thousands more expected in the future, we as a society simply must create a more consistent and fair method by which to deal with all of these claims.

We MUST craft a no-fault remedy that will provide claimants a fair and equitable benefit based upon the actual degree of asbestos-related impairment, and that will preserve the right to later compensation for those who have been exposed and may not yet have manifested disability.

We MUST craft a remedy that ensures that the bulk of the monies spent will reach injured workers, and not be diverted to attorneys' fees and other transaction costs.

And we MUST craft this remedy so that companies such as mine can survive to pay their share in a fair program for asbestos disease compensation.

The tort system ensures none of these things. As the charts presented earlier demonstrate, there is no equity for the victims in the asbestos litigation. As RAND's study demonstrates, there is no efficiency in the tort system. And as the Chapter 11 petitions by three asbestos manufacturers demonstrate, there is no financial stability for the defendants in the tort system. Indeed, as Manville recently reported in its joint annual report/10-K filing, asbestos-health personal injury claimants assert proofs of claim against the company that exceed $7 billion in the aggregate. This is in addition to the $32 billion or more of asserted value associated with the lawsuits filed before the Chapter 11. All this from a company with a net worth of slightly more than $1 billion.

In the face of the mounting burden of asbestos tort claims, both present and future; with our insurers refusing to honor policies purchased by the company; and with the United States unwilling to meet its proper responsibilities in the asbestos compensation matter, Manville was compelled in August of 1982 to file for permission to reorganize its debt under Chapter 11 of the Bankruptcy Code.

Based on independent studies by two separate groups with proven expertise in epidemiological work, Manville at that time was able to estimate the amount of contingent liability it would likely face as a result of the asbestos litigation. Using conservative assumptions, that liability was estimated to be at least $1.9 billion -- and if any of the underlying assumptions were wrong, the liability could be even greater. This estimation process is important because standard principles of accounting, specifically FASB No. 5, require a publicly-held company, once it can estimate its liabilities, to set aside in a special fund the amount needed to pay these claims, a process known as "booking a reserve."

Booking a reserve reduces a company's cash flow and retained earnings. In addition, setting aside such a large sum of capital for contingent liabilities in

Manville's case would have triggered the acceleration of approximately $450 million of outstanding business debt already owed by the company. Once that large a reserve had been posted, our lenders would have taken steps to secure their outstanding loans to Manville against the corporation's assets, and at the expense of unsecured creditors including asbestos claimants. This combination of events could well have resulted in the forced liquidation of major segments of the company, further crippling our ability to survive and meet our remaining obligations. Against this bleak backdrop, and desiring to see all creditors treated equitably, Manville concluded it had no choice but to file the Chapter 11 petitions when it did.

Some have claimed that Manville "manufactured" evidence of crushing economic distress and sought reorganization in bad faith. No foundation for those claims was established after a throrough review by the Bankruptcy Court.

In denying various motions to dismiss the Manville petitions, Judge Lifland made these findings:

> (T)he drafters of the Code envisioned that a financially beleagured debtor with real debt and real creditors should not be required to wait until the economic situation is beyond repair in order to file a reorganization petition....

> In (the) Manville (case), it is undeniable that there has been no sham or hoax perpetrated on the Court in that Manville is a real business with real creditors in pressing need of economic reorganization....
>
> The data submitted by Manville also supports the accepted inference that the $1.9 billion projected debt figure ratified by Manville was the result of careful, conservative and perhaps understated projections...
>
> [If its reorganization petition were dismissed], Manville would become a target for economic dismemberment, liquidation, and chaos, which would benefit no one except the few winners of the race to the courthouse...
>
> "In the instant case, not only would liquidation be wasteful and inefficient in destroying the utility of valuable assets of the companies as well as jobs, but, more importantly, liquidation would preclude just compensation of some present asbestos victims and all future asbestos victims.

Judge Lifland's ruling, on which United States District Court Judge Constance Baker Motley has refused to permit an appeal, affirms again that the asbestos tort litigation is a road leading only to destruction for Manville and unsatisfied compensation claims for victims.

Far from ignoring asbestos claims, Manville seeks for itself in its Chapter 11 precisely what it seeks from Congress for all responsible parties: a rational, no-fault system for compensating persons injured by its asbestos products.

Manville's proposed plan of reorganization, which was submitted to the Bankruptcy Court last year, is composed of three separate, but interrelated, motions. If approved by creditors and the Bankruptcy Court, this plan would provide prompt, equitable compensation to persons with medically confirmed asbestos-related disease, in net-to-claimant amounts that are greater than they received from the company in the underlying litigation. Further, the plan would require Manville - not asbestos claimants - to pay plaintiffs' attorneys, but on the basis of a reasonable rate for hours worked, not a contingency fee. And finally, the plan contemplates paying the company's trade creditors 100 percent of debt owed.

The objective asbestos claims compensation system proposed in our Chapter 11 consists of four parts.

o First, we propose an objective medical/scientific procedure to evaluate the degree of asbestos-related health impairment. Individual claims will be uniformly evaluated on a case-by-case basis using objective medical information gathered from the claimant's own doctor and other medical specialists. In the case of asbestosis, the proposed scientific protocol will yield a determination of the degree of asbestos-related impairment. In the case of malignant disease, a scientific protocol will be utilized to determine the percentage of the injury that is related to asbestos (as opposed to any other causative factor). The medical protocol proposed by Manville has been endorsed by many of the country's leading physicians.

o Second, the corresponding amount of compensation to be offered an individual claimant will be calculated by applying the results of Step One to the benefit levels offered by the plan. These initial award levels would be subject to increase based upon personal factors of the individual claim -- claimant's age, number of dependents, prior earning's history, and the like.

o Third, any claimant would be entitled to appeal both the medical and benefit determinations to independent, expert panels to be appointed by the Bankruptcy Court. As a check against frivolous resort to this mechanism, claimants would bear their own costs of appeal unless the review panels render a decision in their favor.

o And fourth, the Bankruptcy Court will be asked to exercise its authority to supervise attorneys by disallowing contingency fee contracts between claimants and their counsel. Instead, these fees will be paid separately by Manville based upon time spent and services actually rendered, and at a rate determined by the Court.

I would add, Mr. Chairman, that these procedures could easily be adapted to and incorporated into a legislated program. Such a step would, I believe, assure adherence to two fundamental principles upon which there should be universal agreement: first, that compensation should go only to those with bona fide asbestos-related physical impairment; and second, that the amount of compensation should be proportionate to the degree of impairment. Adherence to these principles will go far towards eliminating any fear of abuse such as has characterized previously legislated compensation systems.

If confirmed by the Court, such a claims process will reduce significantly all transaction costs currently associated with the litigation method of resolving claims. Those cost savings will permit Manville to continue in business, generating income with which to compensate asbestos claimaints, pay its debts, and provide continuing economic benefits to its employees, plant communities and shareholders.

Because of the recent uncertainties in the direction of bankruptcy law - an issue still pending before the Congress -- and because Chapter 11 is a dynamic process with much give and take between all of the parties, the company's plan has not proceeded to formal hearing. In fact, Manville representatives continue to negotiate with the hope that a truly consensual plan may be devised, substituted for the plan we have already proposed, and readily confirmed by the Court.

One of the basic legal issues yet to be fully addressed in these Chapter 11 proceedings is the extent to which the rights of _future_ claimants -- those persons already exposed to asbestos, but who have not yet manifested injury -- may be affected or discharged. While declining at this time to rule on the dischargeability issue, Judge Lifland has recognized the pivotal importance of protecting the interests of future claimants. In a separate opinion issued coincidental with his denial of the motions to dismiss the proceedings, Judge Lifland observed:

> [F]uture claimants are indeed the central focus of the entire reorganization. Any plan not dealing with their interests precludes a meaningful and effective reorganization body politic. Any meaningful plan will either provide funding for future claimants directly or provide for the continuation of some form of responsive, ongoing entity post-confirmation from which to glean assets with which to pay them...
>
> Accordingly, a resolution of the interests of future claimants is a central focus of these reorganization proceedings. Any plan emerging from this case which ignores these claimants would serve the interests of neither the debtor nor any of its creditor constituencies in that the central short and long-term economic drain on the debtor would not have been eliminated. Manville might indeed be forced to file again and again if this eventuated. Each filing would leave attenuated assets available to deal with interests of emerging future claimants. Manville could also be forced into liquidation. The liquidation of this substantial corporation would be economically inefficient in not only leaving many asbestos claimants uncompensated, but also in eliminating needed jobs and the productivity emanating from an ongoing concern.

When Manville entered into Chapter 11, the state of the law was such that we were confident that future claimants' rights could be fully protected while integrating them under a confirmable reorganization plan. While that may still be possible, it is far less certain. As a result, our proposed benefits estimation plan at this time applies absolutely only to present claims, while future claims are given the option of participating.

As I indicated earlier, Mr. Chairman, Manville filed its Chapter 11 petitions because no other course of action was available to it that would allow the company to remain a viable, functioning member of industrial society while also meeting its obligations to all its creditors, including present and future asbestos claimants.

A Chapter 11 remedy is a difficult and distasteful course to follow, and not a decision lightly made. And when it is all said and done, it is unlikely that my company's Chapter 11 proceeding will provide a full and complete remedy to the asbestos compensation issue, since none of the other defendant companies will necessarily be involved in the claims procedures we are developing. Nor will the Chapter 11 route *per se* yield a resolution of our disputes with the insurance industry or a determination of the extent of federal government responsibility in the asbestos cases. Again, only Congress can address the full range of issues necessary to arrive at a global solution.

The asbestos issue is being played out in as many as six separate but overlapping arenas. Actions in one arena frequently complement, and just as frequently contradict, progress in another.

For two years, there have been negotiations between some asbestos defendants and some of their insurance companies (the "Wellington Group"), with the goal of producing a voluntary agreement which will encompass (a) a resolution of the insurance coverage disputes, (b) some kind of claims-handling facility, and (c) some agreement among the participating manufacturers as to a cost sharing formula between themselves. Manville, as only an observer of this process, endorses these efforts to wrestle with the many difficult questions posed. But not even the most enthusiastic advocate should believe that the Wellington group initiatives will provide a total resolution of the asbestos tragedy.

The goals of the Wellington Group, as we understand them, are to reduce the legal costs of defending asbestos suits by pooling resources and coordinating defense strategies, and to provide an orderly process for the disposition of claims within the four corners of the tort law. The benefits for defendants in such an agreement are obvious and not to be taken lightly: resolution of insurance litigation and a concommitant flow of insurer dollars; paying only one defense team instead of many; and a rational, and presumably binding, agreement among the asbestos producers regarding their "shares" of responsibility to the tort claimants.

Notwithstanding that these would be positive developments, they are no substitute for legislative action. Neither all insurers nor all manufacturers have had the opportunity to review the Wellington "package." Nor is there any assurance that all parties will participate. In Manville's case, there may be real questions about whether or not, or how, a Wellington agreement can be integrated with the company's Chapter 11 proceedings.

The point, of course, is that the Wellington goals -- admirable as they are and even assuming their acceptance by all the major insurers and manufacturers -- really beg the key question in the asbestos dispute. They will do nothing to eliminate the erratic character of tort awards, since any plaintiff dissatisfied with the claims facility's decision can "exit" to the courtroom. As a result, Wellington does nothing to eliminate escalating demands for punitive damages and jackpot verdicts for the few. As for the clogging of the courts, certainly Wellington offers the hope that claims can be resolved before trial and perhaps even without filing a lawsuit *per se*. However, there is no assurance of cooperation from the plaintiff's bar, and without their help, the desired relief for the overburdened courts cannot be realized. In Manville's case, it may be that a Wellington solution will lead the company to the same Chapter 11 path. The choice is no choice at all. Corporate strangulation by the tort mugger, or by his seductive daughter, Wellington -- either way the company dies while a voyeuristic government watches and says, "there but for the grace of sovereign immunity..."

Similarly, we applaud efforts now underway to reform workers' compensation laws, but such reforms alone offer little hope in the asbestos problem. Not only must these reforms be adopted by up to 50 state governments, but even if the reforms are enacted, most workers will still elect to seek their remedies in tort. The main reason that as few as 5 percent of eligible asbestos workers pursue their workers' compensation remedies is that these benefits are typically offset against tort awards. For an asbestos claimant who is advised by his attorney that he will succeed in tort, there is little incentive to also apply for workers' compensation, since any benefits gained will only have to be repaid from the tort award. Another explanation for the underutilization of workers' compensation is that many plaintiffs' attorneys advise their clients not to file, apparently out of fear that medical evidence developed in a compensation proceeding may ultimately surface to the plaintiff's disadvantage in tort.

As to product liability reform proposals such as S. 44, the Product Liability Act, Victor Schwartz's testimony at the Subcommittee's April 30 hearing addressed what is involved in that effort and how it does or does not impact the asbestos cases. Some believe that S. 44 "cures" the asbestos problem by cutting off asbestos claims in the courts. Others view Senator Kasten's bill as facilitating asbestos claimants' recovery by incorporating a "discovery rule" statute of limitations that will actually expand tort rights in certain states where an asbestos claim would be barred today. Both groups seem to suggest that the S. 44 "solution" obviates the need for compensation system legislation.

Product liability reform is certainly desirable. But as Professor Schwartz testified, no one should equate it with the need for a rational occupational disease compensation system.

Fundamentally, S. 44 would not solve the basic problems facing any of the parties in the asbestos crisis because it would not eliminate the basic reliance on tort litigation:

> Plaintiffs would still be required to litigate their claims in court, subject to long delays, the vagaries of negligence standards, and the luck of the draw with a sympathetic or unsympathetic jury.
>
> Defendants would still be required to defend themselves in court, expending vast sums for counsel to represent them; and they would face continuing difficulties in entering the capital or equity markets while substantial contingent liabilities loom overhead.
>
> Society would continue to incur the direct costs of maintaining access to the courts for asbestos claimants, as well as the indirect costs of providing compensation to those claimants whom the litigation system spurns.

Furthermore, the Kasten bill does not address many of the special problems and issues raised by the unprecedented dimensions of the asbestos problem. Nor is it intended to do so. S. 44 and similar proposals offer no guidance or policy decisions with respect to a number of issues in the asbestos debate, including:

> How does our society weigh the rights of individual claimants against the rights of the entire universe of claimants? In any given case, the courts and juries address only the individual case before the bar, with no obligations to assess the implications of their actions in that one case relative to the 24,000 other current cases and the 32,000 or more future cases yet to mature. Given the finite resources of defendants, society as a whole has a vital interest in a fair resolution of this issue.
>
> What responsibilities does the federal government bear towards asbestos claimants? While various product liability proposals have suggested methods of integrating workers' compensation/FECA payments into the tort judgment framework, this does not adequately address the government's additional, unique responsibilities for its commercial activities with

regard to asbestos. Equally important, S. 44 exempts Longshore claims from the provisions terminating employer subrogation rights, thus continuing existing subrogation practice in a large number of asbestos claims.

Should multiple tort claim situations be resolved in the same manner as other torts? By its silence on this point, S. 44 implicitly assumes no distinction between multiple torts and the usual singular tort claim. Yet the sheer size of the asbestos problem raises difficult legal and social issues, particularly where the courts have already held that consolidation of cases or class action treatment is inappropriate in the asbestos context.

Should punitive damages be available to multiple tort plaintiffs or awarded after severe punishment has already been inflicted through compensatory damages payments? Punitive damages are intended to punish for willful or egregious misconduct and to bring about a change in the defendant's behavior. Many legal scholars believe that once punitive damages are awarded in one case, they should not be available in a subsequent case involving the same commercial activity. Moreover, punitive damages in the asbestos cases serve no purpose as a tool for behavior modification -- the alleged misconduct dates back up to 50 years, and none of today's corporate managers were involved at that time. As the Fifth Circuit Court of Appeals recently held in Jackson v. Johns-Manville Sales Corp and Raybestos Manhattan, Inc.:

> The significance of punitive damages as a deterrent depends upon the size of the penalty increase relative to the "base penalty" exacted by strict liability compensatory awards. Because of the dimensionless character of the prospects for future litigation in this instance, the "base penalty" for all practical purposes, is illimitable. Correspondingly, the significance of punitive damages as a deterrent diminishes to the vanishing point.

In sum, enactment of S. 44 may well provide some increased predictability and uniformity to the product liability system. But in no way do proposals of this type replace the need for compensation legislation specifically directed at the asbestos problem. The so-called Trible amendment to S. 44, which effectively exempts shipyard activities leading to Longshore claims from the bill's termination of all other employer subrogation, is particularly troublesome given the large percentage of asbestos claims that arise out of shipyard workplaces.

The fourth arena in which some aspects of the asbestos problem are being addressed is the myriad insurance coverage litigation. And here there is no more egregious example of stultifying complexity in our legal system. In Manville's case, we filed a suit in California in 1980 that seeks to have the court interpret the language of our insurance policies and render a determination as to when and how coverage under the policies is triggered. Judge Brown has recently set a trial date to begin March 4, 1985.

In the four years since the case began, we have experienced the full gamut of difficulties: first our individual case was consolidated with similar actions filed by other asbestos manufacturers; then finding a judge became an issue (two judges assigned to the case have withdrawn); locating a place for trial has posed unique problems (no courtroom in San Francisco is large enough to accommodate the scores of attorneys, witnesses, and tons of paper involved); and the truly volcanic demands for discovery are tremendous burdens for all parties. (Manville alone has been asked to produce five to six million documents, requiring assignment of 250 people working with eleven microfilm cameras working eight months just to copy -- 55,000 square feet of space in Manville's headquarters has been set aside to store the estimated 47 tons of discovery material. The Travelers Insurance Company estimates that its copying costs alone in this case approach $5.7 million.)

Absent resolution of this case by settlement or verdict, or a superceding "Wellington-esque" agreement, our insurers refuse to indemnify us as the policies require. This situation contributed heavily to Manville's need to file Chapter 11 when it did, and it greatly complicates and delays resolution of the existing Chapter 11 proceedings. Our insurance policies are significant assets of the Manville estate but the bankruptcy court, up to now, has not been able to claim jurisdiction over the litigation.

The fifth arena of asbestos activity is the Chapter 11 proceedings themselves, but the likelihood of a swift and complete resolution of the entire asbestos issue there is equally uncertain for many of the reasons I cited earlier.

Despite our best and continuing efforts, after almost twenty-one months no consensus on a reorganization plan has developed. While I cannot speak for the other asbestos defendant companies currently in Chapter 11, it is my impression that no definitive progress has been recorded by those companies either. And again, referring back to my earlier testimony, Chapter 11 is not a vehicle that will resolve the entire matrix of asbestos issues, nor is it the optimal course that society should accept as a means by which to address occupational disease issues.

So we come to the sixth arena, the only one that can resolve the entire problem fairly: the Congress, through a legislated compensation program.

Mr. Chairman, how should a federally legislated remedy to the asbestos problem be constructed? The fundamental objective of any asbestos-disease compensation legislation would be to construct a no-fault mechanism for the fair and prompt compensation of asbestos-disease victims, and to do so in such a way that program costs are affordable and predictable. The resulting program, much like the original intent of workers' compensation, would fully replace the present time-consuming and inequitable system of asbestos tort litigation.

As I indicated earlier, the philosophy of workers' compensation as an institution was a reassignment of rights and liabilities as compared to the common law system which it was intended to replace. Workers became eligible for compensation under a fixed schedule of benefits on a no-fault basis: that is, workers no longer needed to establish employer liability based on negligence or any other legal theory. The main goals of this adjustment of rights and responsibilities were to bring speed and certainty to the delivery of compensation to injured workers, and to establish defined and predictable costs for employers, both public and private.

Conceptually, then, what we propose is a reaffirmation of the workers' compensation philosophy, extended in the case of asbestos from employer to the product manufacturer, and including the federal government in recognition of the distinct roles it has played in the asbestos tragedy. By including the entire chain where knowledge of risk and the ability to actually control harmful exposures could occur, we vest each party with a vital economic stake in providing as safe a work environment as is necessary to avoid harm. By linking program financing to conditions that are causally related to the harm that occurs, these systems will contribute to prevention of new injuries as well as restitution for those injuries that do occur.

A workable and effective legislative solution to the asbestos problem should contain six basic elements:

1. The bill's coverage should be limited to the precise problem at hand -- assuring quick and adequate compensation for persons injured by exposure to asbestos in the workplace.

2. The solution should build on the existing no-fault workers' compensation systems, modified to eliminate any existing technical barriers that may improperly prejudice fair adjudication of long latent asbestos claims.

3. The legislation should establish a pooled compensation source or trust fund to make reasonable awards to claimants which are in addition to what is available under the applicable workers' compensation systems.

4. This new program should be financed by all private parties involved in the asbestos problem: employers *per se* to pay the workers' compensation benefits required of them under current law, and third-party tort defendants to pay the replacement value equivalent of asbestos tort awards.

5. The federal government should also participate in financing the legislated program in recognition of its disregard for its own health and safety standards, which is a major cause of manufacturer third-party liability in the first place.

6. The legislated program must be the exclusive remedy for asbestos-related occupational injuries.

Let me discuss briefly each of these six elements, for each is critical to arriving at an approach which can function equitably for all parties.

Define the scope. The legislation should be limited to the asbestos-related diseases only, as the asbestos problem is easily distinguishable from other toxic tort problems. The asbestos tragedy derives from decades ago and is centered on the workplace, where the overwhelming number of claimants were exposed. Unlike many other toxic tort situations, the asbestos tragedy has been well studied and is by itself so large as to warrant immediate Congressional attention.

Use Existing Workers' Compensation Programs. Since the bulk of asbestos-related claims arise from exposure in the workplace, a compensation system based on existing state and federal workers' compensation systems makes sense. As witnesses at previous hearings have indicated, while few injured asbestos workers now file workers' compensation claims, when they do file, they succeed almost 90% of the time.

The administrative advantages to using existing workers' compensation systems are clear. No large new federal bureaucracy would be needed -- medical determinations and other claims data would be handled by the existing systems in the course of fulfilling obligations they possess under the law as it stands today. In other words, for purposes of determining whether or not a benefit-in-lieu-of-tort is appropriate from the newly created trust fund under the legislation, we would simply utilize the decisions already required to be made by workers' compensation agencies, rather than incur the heavy expense, time, and uncertainties of a tort proceeding or an entirely new system.

Establish Realistic Benefit Levels. Workers' compensation systems generally provide a disabled worker with up to two-thirds of lost wages, plus all reasonable and necessary medical and rehabilitation expenses. The issue to be addressed in a federally legislated remedy is what amount of additional, "supplemental" compensation is reasonable if existing tort rights are to be foreclosed. The large data base provided by asbestos claims dispositions, which is discussed earlier in my testimony, provides the only real-world measure of claims value, and we would argue that that data suggests reasonable parameters within which to legislate. Obviously the Congress would have to determine the appropriate supplemental benefit. The RAND Corporation, after extensive investigation and statistical analysis, reported to the Subcommittee that the average "net-to-claimant" recovery is $35,000. Mr. Baron suggests $80,000 is a more accurate representation of the asbestos tort average. Manville's actual claims experience supports the accuracy of the RAND analysis, and I would like to emphasize that the figures reported by RAND are subject to reduction by potential employer subrogation liens, whereas our legislative proposal would provide benefits over and above workers' compensation.

We would suggest that the "supplemental" benefit be paid from the new federal trust fund in lump-sum amount. This would permit claimants the widest latitude and discretion in using their compensation, and is also consistent with the tort practice which the benefit is intended to replace. And, if a claimant wishes to be paid along the lines of a "structured settlement," then the trust fund could assist in securing a privately available annuity in those cases.

Require Asbestos Defendants to Participate Financially. Existing state and federal workers' compensation systems already have appropriate financing mechanisms in place, and no change in those formulae need be addressed in the federal legislation. The new trust fund to pay supplemental benefits will, of course, require financing. Since the legislative solution we advocate will replace existing or potential asbestos tort suits, the fund should look to the existing or potential tort defendants in those suits as a source for financing. This includes asbestos product manufacturers like Manville and the member companies of the Committee for Equitable Compensation, together with their insurers whose policies cover these entities for asbestos tort claims today. To the extent such policies are applicable to the asbestos tort claims, insurers should contribute their full value. A determination of those sums is possible through any number of procedures, including a privately-negotiated settlement of the litigation pending in California or through the Wellington process.

Require the Federal Government to Contribute Also. Only the Congress has the broad scope of authority needed to resolve conclusively the financial responsibility of the federal government to citizens injured by government negligence. It is clear that the courts will no longer countenance the callous brush-off that plaintiffs such as asbestos shipyard workers have received from both Democratic and Republican administrations. As recently as ten days ago, the U.S. District Court in Utah awarded damages to individuals injured through government negligence in atomic testing activities. And with specific regard to asbestos use in naval shipyards, the U.S. District Court in San Francisco has overruled the Justice Department's motion to dismiss Manville's case in that court and has ordered that the government must stand trial on the allegations of government negligence.

Further, under the legislative program we advocate, no general obligation to the U.S. Treasury would be created; and the Congress should stipulate specific authorization ceilings for the government's payments. If the amounts needed for the compensation fund exceed these ceilings, then either the program should terminate or the Congress will have to explicitly vote to fund the increased payments.

Finally, it should be noted that a federal assessment under a legislated compensation program need not represent wholly new budget expenditures. In a 1983 report, the prestigious Urban Institute found that enactment of an asbestos compensation program could yield substantial budget savings, ranging from $56 million a year or more. Further, as the attached news story from the Scripps- Howard News Service indicates, "a special team of 35 Justice Department lawyers now works full time on asbestos cases, and Congress is being asked to fund the hiring of more." Clearly, the federal government is already "paying" for asbestos disease, and these monies could be better utilized by compensating injured workers rather than adding more asbestos specialists to the Justice Department's roster.

Unify Compensation Remedies. Just as workers' compensation today represents a worker's exclusive remedy against his employer, so would the legislated system represent the single, unified means of compensating asbestos claims from all parties in the chain of causation. Exclusivity is at the very heart of the legislative approach. Without it, third-party suits will continue to make multi-millionaires of a small group of lawyers and burden the court system and the defendant companies.

Predictable financial failures will weaken our ability to finance the legislated system in the future, and it will be impossible for all claimants to be assured a fair payment from the funds available. Legislation that established an alternative remedy, but failed to unify it with existing programs as the sole remdy, would lead to greater legal controversy, expense and delay -- not less.

The proposed legislation is grounded on the same logic which supports current workers' compensation systems, whereby workers forego their rights to sue in court in exchange for prompt, adequate compensation, and defendants forego their legal defenses in exchange for predictable costs. A no-fault system is a fairer bargain for each.

Legislation faithful to these six principles would make possible a rational system for compensating asbestos personal injuries. Workers would receive prompt and equitable compensation for their injuries, based purely upon an objective medical diagnosis. Private enterprises would receive the financial stability and predictability that will permit them to be major contributors to the compensation fund. And society would receive the continued economic benefits which the defendant companies provide to communities in virtually every Congressional District in the Nation, together with continued and substantial tax revenues assessed by local, state, and federal governments. Importantly, the public also gains a less cluttered court system which is freed to adjudicate other pressing matters better suited to a fault-based system and traditional litigation.

Mr. Chairman, some have suggested - including the Justice Department here this morning - that our belief that the federal government must participate financially in a resolution of the asbestos-disease compensation problem is somehow inappropriate or misplaced. The government's own facts, recorded in the Archives and elsewhere prove otherwise.

Government financial responsibility and participation in an asbestos remedy is simple equity. We believe that equity demands that the financial burden of compensation be distributed among all who were responsible for exposing workers to asbestos. There is no reason to exclude the federal government from full participation in the remedy, since it has been a dominant force between 1936 and the 1970's in the development and fostering of the current asbestos tragedy. But for the government's negligence, thousands would not have been overexposed. The private sector should not bear the burden for the government's own misconduct.

As internal government documents establish, the United States has been the single largest user of asbestos products, and as a result has exposed in its workplaces the largest number of workers. But wholly aside from its role as an employer, the United States has been and remains a supplier of asbestos and asbestos products. Just as Manville and others in the private sector have been held liable to pay workers' compensation benefits to employees injured in their workplaces AND are potentially liable as product suppliers, so should the government meet its obligations in both capacities.

The government has traditionally avoided standing in the courtroom with all other asbestos defendants. This is the result of statutes which create a disincentive to seek recovery from the government, even in those limited circumstances where suit is permitted. Attorney fees in actions against the government, for example, are limited by law, and punitive damages are prohibited altogether. It is interesting to note, however, that in one asbestos case the Justice Department paid over $5 million in settlement amount: an action that hardly comports with the view that the government bears no liability.

In short, we believe it is inequitable to hold the private sector to one standard of conduct and the government to a different standard where the identical commercial activity is at issue. We are pressing this and other legal points in a variety of lawsuits throughout the nation, under both contract law and tort law theories, and we fully expect to prevail in this litigation. In considering legislation, the Congress should exercise its own judgment regarding an appropriate allocation of responsibility between the public and private sectors. It is important to note that, for purposes of a legislated remedy, Manville does not suggest that the federal government is responsible *in place of* the private sector; we contend only that the United States should participate *along with* the private sector and in an amount commensurate with its negligent actions.

Manville has undertaken a great deal of research on the question of government responsibility in the asbestos cases. Mr. Chairman, I would ask that copies of our three Claims Court actions and three Federal Tort Claims Act cases now pending against the Government, together with supporting documentation, also be included for the hearing record.

This admittedly is an overwhelming amount of material, all of which supports the view that the United States had superior knowledge regarding the health risks associated with asbestos fiber; that nonetheless the Government mandated the use of asbestos products for certain military and strategic applications; that despite its awareness of the risk, the Government allowed thousands of workers to be overexposed to asbestos fiber; that the Government as a shipyard owner and operator had both the obligation and the authority to enforce safe working conditions, but did not do so; and that even in more recent times the Government has continued to expose workers to unacceptably high levels of asbestos dust -- further exacerbating the potential liabilities facing asbestos tort defendants under present law.

The adverse impact the federal government had on the tragic history of asbestos-related diseases since World War II is evidenced in the following facts. These facts are supported in recently declassified or otherwise restricted government documents which repeatedly illustrate the government's authority and control over asbestos products, their uses, and hence the current injuries experienced by shipyard workers.

I. THE FEDERAL GOVERNMENT CLASSIFIED ASBESTOS FIBER AS STRATEGIC AND CRITICAL, THEN SPECIFIED AND MANDATED THE USE OF ASBESTOS IN PRODUCTS.

In a 1959 report pertaining to national defense and submitted to the Executive Branch, Oliver Bowles of the Bureau of Mines reported:

> The procurement of necessary supplies is a problem of worldwide scope and in every war emergency asbestos assumes top priority among strategic minerals.

Asbestos was mandated by the federal government for use in ships in order to prevent one of the great dangers at sea -- shipboard fire. In 1934 a luxury ship named the Morro Castle caught fire just off the shores of Asbury Park, New Jersey. The vessel burned literally from stem to stern, with great loss of human life.

This disaster and similar ship fires prompted detailed Congressional investigations and hearings, and explicit government requests that industry devise products that could protect ships of all kinds from fire. The Morro Castle tragedy led to Congressional enactment of the Merchant Marine Act of 1936, which in pertinent part required all vessels built in the United States to include fireproofing materials and to be certified by the Maritime Commission as built in compliance with the Act.

Any number of different products were utilized in an attempt to secure the domestic fleet and merchant shipping against fire. In each case, some flaw or potentially serious side effect was identified that eliminated from consideration all substances, but one: asbestos. Only asbestos was found to have the required combination of properties ideally suited for shipboard use:

> It was fireproof, so it met the fundamental criteria of the Merchant Marine Act;

> It resisted attack by the elements, which meant it would have a relatively long useful life in a salt water and salt air environment;
>
> It was lightweight, which saved fuel and permitted greater cruising speed; and,
>
> It resisted vibration, which meant pipe covering was secure and protected.

So asbestos products -- for fireproofing and thermal insulations, for gaskets, and for innumerable other uses -- were required for use in domestic shipbuilding and repair, as for example, in the following government product and ship specifications:

> Material - Asbestos cloth and strands shall be made of good quality asbestos . . .
>
> (Navy Specification 32C11c, "Cloth and Strands, Asbestos," November 1, 1939)
>
> BUSHIPS Technical Manual, Chapter 39, "Thermal Insulation" specifies numerous uses of asbestos, including "Propulsion reciprocating engine steam cylinders, valve chests, and other steam enclosing surfaces are insulated with 85 magnesia or asbestos blocks . . ."

Indeed, since one could not obtain Maritime Commision certification for a vessel without full compliance with all Maritime specifications, virtually every vessel built or repaired in this country contains asbestos. As indicated in an April 22, 1943 document prepared by the Department of Commerce for the Board of Economic Warfare:

> Substitutes: There is no generally acceptable substitute for asbestos in specific applications where resistance to heat, electricity, acid erosion are prime considerations.
>
> Mineral wool, glass wool and the shorter fibers have been utilized for insulation in some instances in lieu of the critical grades. Asbestos is, however, being

> used in the war program as a substitute for some other materials, e.g., asbestos pipe is being used in some applications in lieu of cast iron and steel pipe. Short fiber in some instances is being used as a substitute for critical grades of long fiber.
>
> Since only African varieties of asbestos satisfy certain military requirements, the essential problem is that of maintaining uninterrupted imports from Rhodesia and the Union of South Africa.
>
> (Raw Materials Data Sheet prepared for Board of Economic Warfare by Department of Commerce, April 22, 1943)

The government again acknowledged there were no satisfactory substitutes for asbestos in a 1944 memo:

> Asbestos textiles are a non-substitutable component in all combat vessels.
>
> (Memorandum to WPB Regional Directors and Production Urgency Committees in Areas where Asbestos Textile Plants are located from Fred Sinclair, Procurement Policy Division, June 20, 1944.)

II. THE FEDERAL GOVERNMENT PURCHASED, IMPORTED, STOCKPILED, AND SUPPLIED ASBESTOS FIBER.

A 1943 memo from the Acting Chief of Public Welfare and Facilities Division states:

> Instead of leaving the purchase and importation of asbestos, which is largely a foreign product, to private concerns, the government has adopted the policy of buying and importing from England asbestos fiber mined in South Africa and needed by the USA, and selling it to the domestic processors as and when required by them.
>
> (February 18, 1943, memorandum to Mr. Irving Swordlow, Acting Chief, Public Welfare and Facilities Division.)

This fiber, after being imported from South Africa by the government, was stockpiled and supplied to manufacturers who were required to incorporate the fiber into products mandated by the government. During World War II, the federal government was the purchaser of asbestos fiber primarily from South Africa. For example, the Defense Commission on October 18, 1940 recommended the purchase of 20,000 short tons of asbestos. (Memorandum to Mr. George M. Moffett from C.K. Leith, February 25, 1941.)

With World War II looming on the horizon, the Government's demand for asbestos products increased -- well before Pearl Harbor the United States had undertaken to assist the Allies in fleet preparedness, maintenance, and repair. As historians have recorded, the United States ultimately constructed over 6,000 new ships and refitted 67,000 others in the prosecution of the war. And, of course, each one was fitted with new thermal insulations containing asbestos.

III. THE FEDERAL GOVERNMENT KNEW OF THE ASBESTOS HAZARDS SINCE THE 1930'S.

As the Justice Department acknowledges in its own Answer to Manville's first Claims Court Complaint,

> between 1898 and 1945, there were over 200 articles published in medical, safety engineering and insurance journals describing the health hazards of asbestos. . .

In fact, the Department of Labor in 1918 published a report on the English experience in asbestos textile plants. The U.S. Public Health Service actively reviewed and in 1935 published the asbestos studies sponsored by Manville and others. Further, the Public Health Service initiated its own asbestos study, which was published in

1938. It was that latter study which first advanced what was believed to be a "safe" level of asbestos exposure "below which new cases of asbestosis probably would not appear."

Thus, no later than the 1930's, it is clear from its own actions that the Government was aware of the potential risks then known to be associated with excessive asbestos exposure. The government's awareness of the hazards associated with shipyard overexposure to asbestos appeared early during World War II. In December, 1942, Daniel S. Ring, Director of Shipyard Labor Relations for the Maritime Commission, acknowledged in a public meeting a concern over asbestos exposures, but indicated that the wartime priority meant production was valued over safety, stating that "air analyses and checks need not be done often" if they would inhibit ship production.

Mr. Chairman, the Justice Department likes to suggest that the government is not responsible for the health and safety conditions in the contract shipyards, even during the World War II period. Again, this is contrary to the facts. The obligations assumed by the government under the Walsh-Healey Act aside, there are more definitive examples of the government's assumption of responsibility for working conditions in all shipyards, privately owned included.

For example, federal authorities apparently were sufficiently concerned in 1943 to complete and distribute health and safety standards for contract shipyards. Entitled Minimum Requirements for Safety and Industrial Health in Contract Shipyards, the book explicitly acknowedged the potential risks associated with asbestos if proper work practices were not followed.

Moreover, during World War II, the U.S. Navy and the Maritime Commission jointly conducted a series of industrial hygiene surveys of private yards building vessels under government contracts. Recommendations for improved working conditions were made, and some yards were reinspected for compliance on several occasions.

More recently, Manville's ongoing review of documents at the National Archives -- documents which by and large were classified and not available for public inspection until the 1980's -- has unearthed a March 26, 1945 memorandum from the U.S. Maritime Commission which establishes that the federal government was directly responsible for contract shipyard safety and health. As the memorandum states,

> The question has recently been raised as to the extent of your authority in maintaining the Minimum Standards with respect to subcontractors whose employees are working in shipyards.

> By reference to the Minimum Standards, you will see that the Joint Letter appearing in the forepart of the bulletin, signed by former Secretary of the Navy Frank Knox, and Admiral Land for the Maritime Commission, mentions workers in shipyards. The third pargraph of the letter is specific in this respect, where it talks of 'one million workers in shipyards,' and not employees of shipyards.
>
> You have ample authority to insist that subcontractors employing men in shipyards shall observe the standard safety and health practices.

This memorandum on its face establishes the large health-and-safety domain assumed by the federal government with respect to shipyard activity. The federal government was in the shipyards and responsible for almost every phase of activity undertaken. Did their actions measure up to their knowledge of the risk, or was this, as I've suggested to other audiences, a classic case of the federal government saying "Do as I say, not as I do," with the most deadly of consequences.

IV. THE FEDERAL GOVERNMENT REPRESENTED IN 1946 THAT SHIPYARD WORK WAS A SAFE OCCUPATION DESPITE ITS OWN CLASSIFIED HEALTH SURVEYS TO THE CONTRARY.

For at least two years prior to World War II, the Navy was aware that its shipyard workers were being overexposed to asbestos dust. In an observation which in retrospect seems as profound as it was prophetic at the time, the Surgeon General of the navy, Admiral Ross T. McIntire, (who parenthetically was President Roosevelt's personal physician) reported in 1939 to the Secretary of the Navy:

> A medical survey . . . was conducted recently with the object of ascertaining whether asbestosis in any stage could be detected . . . x-rays of the chest were essentially negative in all cases. However, it is not

> considered that the negative findings precluded the future development of asbestosis by continued exposure under present occupational conditions. (Emphasis added.)

In a March 11, 1941, memorandum from the Commander of the U.S. Navy's Division of Preventive Medicine to Surgeon Admiral McIntire, Commander Stephenson states:

> (i) Asbestosis. We are having a considerable amount of work done in asbestos and from my observation I am certain that we are not protecting the men as we should. This is a matter of official report from several of our Navy yards. (Emphasis added.)

Earlier in the same memorandum, in which the Commander indicates that President Roosevelt opposed a Public Health Service Request to survey the shipyards because "they might cause disturbance in the labor element," the general state of working conditions in the Navy shipyards is made apparent:

> None of our foundries would pass the necessary inspection to obtain workers' compensation insurance from any of the insurance organzations. I doubt if any of our foundries would be tolerated if the state industrial health people were to make surveys of them.

Was this just a freak occurence, early in the War years? Again, the unfolding evidence is to the contrary.

In July 1942, the reported accident and occupational health conditions in both Navy shipyards and Maritime Commission contract shipyards attracted the unfavorable attention of Navy and Maritime Commission officials. Because of the need to maintain full operating forces in shipyards and in order to secure maximum production of all types of shipping, it was felt that a safety and occupational health survey of the shipbuilding industry was necessary to determine what was wrong and what should be done to correct it.

Consequently, the Navy Department in cooperation with the Maritime Commission agreed to sponsor a joint project in which the shipbuilding industry would be surveyed from the standpoint of accident prevention and the control of industrial disease. The survey revealed that the problems in the shipyards were far worse than had originally been thought, and beginning in 1943 similar surveys of contract shipyards were performed by teams of Navy and Maritime Commission hygienists on a periodic basis for the duration of the war.

The Navy also opted to carry out a health and safety program in its own shipyards "without interruption or interference from any other agencies." In Navy and Maritime Commission informational and instructional materials, asbestosis was stated to be one of the eight most common types of shipyard industrial diseases, and standards for shipyard safety were provided to the Government teams of hygienists.

Dr. Phillip Drinker, Professor of Industrial Hygiene at the School of Public Health of Harvard University, was retained by the Maritime Commission as its chief consultant on shipyard industrial health, and in that capacity supervised the health surveys of the shipyards.

In the course of performing the wartime shipyard surveys, the hygiene teams reported a general disregard for asbestos hazards and a continuing failure to observe the recommended health standards outlined in the _Minimum Requirements For Safety and Industrial Health_ which I have previously mentioned. In January of 1944, Dr. Drinker informed the Navy's Bureau of Ships that the asbestos dust counts measured at New York Shipbuilding Co. "ran up to 25 million." Noting that "a figure of 5 million for asbestos is recommended," Dr. Drinker added that the dust counts reported by the USPHS "were very much higher than anyone would recommend." (January 8, 1944, letter from Dr. Phillip Drinker to Captain Ingram, Bureau of Ships.) In July of 1945, Navy hygienists reported to Dr. Drinker the status of wartime compliance with Todd Pacific Shipyards, Inc. (Seattle Division), "There has been no satisfactory compliance with any of these recommendations" to prevent exposures to excessive concentrations of asbestos.

In December of 1944, Dr. Drinker ordered Lt. Commander Fleischer, Maritime Commission officer resonsible for East Coast shipyards, and Dr. Waldemar C. Dreessen, past Assistant Surgeon of the USPHS and wartime consultant to the Maritime Commission, to investigate a concern expressed by the shipyard workers at the Bath Iron Works Shipyard who feared that excessive asbestos exposure was causing respiratory troubles. Dr. Dreesen was one of the USPHS personnel responsible for that agency's 1938 study of asbestosis in the asbestos textile industry and which had first recommended the standard of 5 mppcf as a safe exposure level for asbestos.

The Bath Iron Works Shipyard had been previously surveyed in September, 1942, by a team of Navy and Maritime Commission hygienists who reported that:

> The conditions in this shop present a very real asbestosis hazard and immediate steps should be taken to segregate the most dusty processes into a well ventilated area. (Emphasis added.)

The result of their 1944 asbestos hazard investigation was alarming. Of a total of thirty-eight (38) shipyard worker x-rays reviewed, twelve (12) showed significant x-ray changes consistent with exposure to asbestos, and six (6) were diagnostic. Dust counts were measured at between 34 million and 52 million particles, or between six and ten times higher than the USPHS 1938 Government standard for "safe exposure levels."

As I have mentioned, the Industrial Hygiene Health Surveys from which I have quoted, as well as the hundreds of other such surveys conducted by Navy and Maritime Commission hygienists and medical officers were, for reasons of national security, classified and any unauthorized disclosure was expressly made punishable under the provisions of the Espionage Act. These surveys were only declassified or released for public consumption in recent years.

In 1946, however, the Navy permitted publication of a wartime survey of asbestos workers who had been exposed to asbestos in Navy and Navy contract shipyards. That publication, "A Health Survey of Pipe Covering Operations in Constructing Naval Vessels," was authored by Dr. Drinker, Commander Fleisher and two U.S. Navy lieutenants, and was published in the January issue of the Journal of Industrial Hygiene and Toxicology ("Fleischer-Drinker Report"). All x-rays for the survey were read by Dr. W.C. Dreessen of the United States Public Health Service. Although the participants in that survvey were personally aware that "very real asbestosis hazards" had been reported in the classified wartime shipyard surveys, and even though several cases of asbestosis had been discovered among shipyard insulators with long-term exposure, the "Fleischer-Drinker" publication nevertheless concluded that shipyard insulation work "(was) not a dangerous occupation," and that the conclusions concerning the risks to asbestos workers in the asbestos industries were not applicable to the shipyards.

My company relied upon such representations and assurances by the Government until 1964, when Dr. Selikoff issued the results of his study of the occupational risk from asbestos exposure to the insulation trade.

V. SINCE WORLD WAR II, THE GOVERNMENT HAS CONTINUED ITS FAILURE TO PROTECT SHIPYARD WORKERS USING ASBESTOS-CONTAINING MATERIALS.

The federal government's cavalier attitude towards the health of shipyard workers did not end with World War II. For decades after termination of the massive wartime shipbuilding program, the government continued to classify asbestos as a strategic and critical material and to purchase, stockpile and sell asbestos-containing products. As recently as 1983, the GSA Product Catalog lists a variety of asbestos products for sale.

The Defense Production Act of 1950 authorized the government to mandate orders to private suppliers for asbestos-containing materials, which were used in both government and private shipyards for the construction, repair and conversion of government vessels. Moreover the refurbishing or scrapping of vessels constructed for the government during World War II likewise required the removal or "ripout" of asbestos-containing materials at both government and private shipyards. The government thus continued to mandate the handling of asbestos by shipyard workers while at the same time ignoring the consequences of exposure to asbestos fibers.

While the government's disregard for excessive shipyard exposures to asbestos may be partly understandable during the wartime emergency, its behavior in the post-war years is not. Examples of post-war neglect are abundant:

In the early 1950's, shipyard workers were being exposed to amounts of asbestos dust from rip-outs in excess of the USPHS/American Conference of Government Industrial Hygienists and Navy standards. (See, "Estimates of Asbestos Concentration on Long Beach Naval Shipyard" 2-3, Letter of Commanding Officer of Naval Regional Medical Center, May 8, 1979.)

In May-June, 1964, workers were exposed to hazardous levels of asbestos dust at the Long Beach Naval Shipyard, and adequate ventilation for worker protection was not possible with the equipment at the shipyard. (See, Survey of William Marr, Chief Industrial Hygienist at the Long Beach Naval Shipyards, T/P Exh. 146, Glover v. Johns-Manville Corp. v. United States of America.)

In March, 1968, workers were being exposed to asbestos dust concentrations above the current threshold limit value during shipboard operations, without provision of adequate ventilation and other workplace precautions, at the San Francisco Bay Naval Shipyards. (See, Rep. No. 68-5, San Francisco Bay Naval Shipyard Industrial Hygiene

Division, Industrial Health Survey of Pipcoverers' Asbestos Exposures, Hunter's Point Site, 3-5, March 29, 1968.)

In 1969, in every government and contract shipyard surveyed, it was found that although yard management was aware of the asbestos dust hazard, it had generally failed to exercise sufficient care necessary to abate the problem and had failed to enforce the use of respirators by shipyard workers. (See, Survey of Hazards of Asbestos, Final Report of Officer in Charge, Naval Ship Engineering Center, Philadelphia Division, Project FA-287, September 2, 1969.)

Mr. Chairman, it is particularly interesting to note the different responses that Dr. Selikoff's 1964 findings elicited from industry and government. Where the private sector, led by Manville, immediately began voluntarily placing a warning label on its asbestos products, the government undertook no such warning program. It wasn't until June, 1973 -- nine years later -- that the Navy issued BUMED Instruction 6260.14, requiring for the first time the posting of caution signs and specifying warnings for asbestos products.

Moreover, the Navy was not implementing effective industrial hygiene programs for its shipyard workforce.

Mr. Sheldon Manning, Industrial Hygienist at the Long Beach Naval Shipyard, made these observations in a June 30, 1970, memorandum:

> The Industrial Hygiene program at the Long Beach Naval Shipyard since the second opening of the Billet in 1951 has been nonexistent, or marked by weakness whenever the billet was filled....
>
> ... in 1958 Bill Marr was recruited from the Naval Gun Factory in Washington, D.C., and served [as Yard Industrial Hygienist] until the end of 1964. His program lacked support, with little equipment and no secretarial help.... Before he left for Panama [in 1964], Mr. Marr gave an interview to a reporter on the hazards of asbestos exposure which reflected adversely on the Shipyard. This bad publicity incurred the wrath of the Shipyard Commander and soon afterward the Industrial Hygiene billet was abolished. After a lapse of two years the billet was reinstated.

As recently as 1979, the Navy acknowledged that asbestos products *per se* are not inherently dangerous, and that any risk arises only if proper work practices are not followed during installation or repair. An August 9, 1979, memorandum from the Chief of BUMED, the Navy's Bureau of Medicine and Surgery, states:

> BUMED considers asbestos or asbestos-containing materials in themselves are not hazardous except under conditions during which numerous individual fibers are released into the environment as a result of cutting, grinding, or abraiding.

Yet the Navy consistently failed to enforce precautionary measures to reduce the risk of exposure. In the mid-1960's, as satisfactory substitutes for asbestos-containing insulation and fireproofing materials were developed, the government continued its pattern of disregard for the health of workers using asbestos-containing materials. Not until ten years after the 1964 Selikoff findings did the Navy adopt a policy requiring the substitution of asbestos-free products wherever possible (NAVSEA Instruction 5100.24, October, 1975), and even then the policy was regularly ignored. The reason given by Navy Vice Admiral T. J. Bigley for the delay was that an overall Navy policy prohibiting the use of asbestos could not be promulgated until the thousands of pounds of asbestos products which the Navy had in warehouses were either sold or used (See, Letter from T. J. Bigley, Vice Admiral, U.S. Navy, to Robert F. Hughes, Assistant Director, General Accounting Office, January 6, 1979.)

The government later sold off its existing inventories of asbestos-containing materials "as is", without warning of potential health hazards to either purchasers or potential users. In addition to delaying the implementation of regulations governing Navy uses of asbestos products until after it had sold its own inventory, government memoranda disclose that the Justice Department and the Navy -- to use their own words -- apparently considered (and ultimately rejected) making "asbestos fodder" out of their own employees -- that is, using federal employees to handle the asbestos products which the government sold.

The express rationale for his option was to limit government liability: injured federal employees may seek only FECA benefits, but may not sue the government in tort. (See, Memorandum by George Seeburg, Safety Director, DPDS, May 8, 1978. See also, Memoranda for Record by Bruce Kasker, Assistant Counsel, Defense Property Disposal Administration, Subject: Asbestos; December 19, 1977, Decmeber 30, 1977, January 4, 1978, January 28, 1978, April 14, 1978, and June 28, 1978.)

The continuing evolution of the law suggests that the United States will become obligated to contribute to compensation for asbestos personal injuries. The Supreme Court's 1983 decision in Lockheed v. The United States of America reflects this evolution in judicial reasoning. Judge Gignoux's decision last month in the In Re: Maine Asbestos Litigation case, extended the Supreme Court's logic in Lockheed to Longshoreman and Harbor Worker cases. Together with the several lawsuits instituted by asbestos defendants against the United States directly, these cases are eroding government's capacity to resist its rightful assessment of responsibility in the asbestos tragedy.

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Mr. Chairman, the asbestos problem is unprecendented and other toxic injury lawsuits, and other toxic torts where unique, and as such requires unique treatment. There are some government responsibility is alleged. But today, here and now, there is no case completely analogous to that posed by asbestos, where all of the following are present:

> Tens of thousands of persons are already pressing claims in the nation's courts AND
>
> Tens of thousands more claims are known to be headed towards the courts in the next decades AND
>
> The long latency period associated with disease manifestation has eliminated the opportunity for preventive measures to protect the population already exposed AND
>
> The cause-and-effect relationship between exposure and resulting injury is well understood, and conceded by all of the parties AND
>
> The exposures responsible for the majority of injuries do not occur within the fixed site of the product manufacturer, but rather occur in the course of installing the finished product AND
>
> The federal government has a demonstrable and primary role in the circumstances which led to most exposures, and indeed controlled the work conditions under which those exposures occurred AND
>
> Existing institutions designed to provide a recourse for compensating victims of these injuries -- both workers' compensation, through underutilization, and tort litigation, through its irrational inconsistencies and overwhelming inefficiencies -- have broken down.

Only Congress can address the "legal gridlock" which has occurred in the asbestos cases. Asbestos personal injury claims to date are almost invariably related to workplace exposures, and as such the cottage industry spawned by the availability of a tort remedy for these injuries represents an unacceptable transfer of liability from the workers' compensation system to third-party manufacturers.

As a result, we have removed major incentives for employers to provide a safe workplace -- if employers are not held financially accountable through the workers' compensation system, then what incentive do they have to utilize the best available technologies to reduce asbestos exposures in the future? Whatever system of compensation we as a society accept, surely it should be predicated on placing the burden on those best able to control whether or not an injury will occur in the first place.

A system which places the burden for compensating asbestos victims solely on asbestos product manufacturers therefore fails both equity and regulatory tests. This is the failure of the existing tort and workers' compensation systems. A legislated compensation system to which the product manufacturer contributes, but which also abolishes the employer's subrogation lien for reimbursement of workers' compensation benefits and directs claimants into the system designed to adjudicate work-related injuries, distributes the burden of compensation fairly. It also serves the collateral goal of deterring conduct which can make a difference in whether or not future disease cases will be seen, and how many.

The dimensions of the asbestos compensation issue are such that it does no good to dwell on questions of legal "fault," a proper matter for the courts. If we are to ensure that the entire class of asbestos victims will be compensated -- not just the first plaintiffs to the courthouse -- then the courts, with their focus on individual claims, are ill-suited to the task.

In this instance, the failure to act carries potentially grave implications indeed. A substantial number of injured claimants may well go uncompensated because of an inability to establish legal fault on the part of a defendant. An even larger number of claimants, those who do not currently manifest disease but feel compelled to litigate anyway, will absorb resources that otherwise could be available to pay presently injured claimants. And companies like my own, faced with unmanageable contingent liabilities, may be compelled to enter reorganization or liquidation proceedings at an increasing rate. And then who will be available to compensate future claimants?

Mr. Chairman, this is no system for compensating occupational diseases. As Supreme Court Justice Felix Frankfurter observed over thirty years ago,

> Legislation is needed which will effectively meet the social obligations which underlie the incidence of occupational disease. The need for such legislation becomes obscured and the drive for it retarded if encouragement is given to the thought that there are

> now adequate remedies for occupational diseases in callings subject to Congressional control.

That opinion was expressed in a 1949 silicosis case before the High Court, styled _Urie v. Thompson_. A Wisconsin judge reiterated the sentiment more recently in an asbestos case:

> We can only hope that the Wisconsin or Federal legislature will enact some measure to compensate these plaintiffs and others like them who are victims of a product that the consuming public for many years wanted manufactured. (U.S. Court of Appeals for the Seventh Circuit, _Charlotte E. Neubaues v. Owens-Corning Fiberglas Corp. v. Pittsburgh-Corning_)

The silicosis problem was solved because workers' compensation systems adapted to extend equitable coverage rules to these cases _before_ the courts intervened in large numbers and _before_ the tort law had evolved to its present state. The same is not true in the asbestos cases, and no realistic change in the law of products liability can now turn back the clock and resolve the problem in the same fashion.

We encourage the Subcommittee to review closely the hearing record generated by these three days of hearings. We believe the record will bear out a conclusion that tort litigation is an outdated and haphazard approach to the asbestos compensation issue. Neither the injured workers nor the third-party defendants can long tolerate the status quo. Only the Congress can adequately address the full spectrum of issues that interplay in the asbestos tragedy, and we implore you to act.

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G. Earl Parker
Senior Vice President
Law and Public Affairs

June 7, 1984

The Honorable Don Nickles
Chairman
Subcommittee on Labor
Senate Committee on Labor and
Human Resources
SH-608 Hart Senate Office Building
Washington DC 20510

Dear Chairman Nickles:

This letter seeks to clarify the record of the Subcommittee's May 21 hearing on occupational disease compensation. I would ask that it be included in the permanent record of the proceedings.

In response to questions from the Subcommittee, Congressman John Erlenborn stated: "Well, I understand that the Travelers Insurance Company is not participating because it does not wish to prejudice its position in ongoing litigation with the Manville Corporation, which is refusing to participate. I understand that Manville has refused to consider dropping its suit to permit both Travelers and itself to participate." Mr. Erlenborn's use of the words "refusing" and "refused" is inappropriate and misleading.

With respect to the Wellington process, others acted intentionally to exclude Manville from participating in those negotiations. The participants required that their ongoing discussions not be impeded by premature public speculation, and the rules of our Chapter 11 proceedings may not have permitted Manville to preserve that level of confidentiality. I personally requested at several points during the past year that Manville be allowed to participate or at least be informed as to those negotiations. My requests were refused. During much of that time, Manville was engaged in discussions with several of its key insurers through a Steering Committee chaired by Mr. Ray Stahl, Sr. Vice-President of The Travelers. Those discussions which paralleled the Wellington group discussions were terminated by The Travelers.

With respect to Mr. Erlenborn's statement that Manville's dispute with The Travelers has prevented that company from participating in the Wellington process, the Congressman has been misinformed. The Travelers' representatives have participated in the Wellington process from its inception. The Travelers' Vice President Ray Stahl was, in fact, the operating leader of the insurance industry negotiators throughout most of the negotiations. As it did with the Manville Steering Committee, The Travelers disassociated itself from the Wellington negotiations. It is false to suggest that this result was due to any action or refusal by Manville.

In sum, Manville has not "refused" to consider the Wellington agreement; we are just now being permitted the opportunity to review and understand it. It appears to have many advantages to Manville and the industries involved. At this point, The Travelers has conditioned the tentative settlement of Manville's litigation on their being given a control position which could be used to prevent Manville from joining Wellington. Manville's absence from the Wellington negotiations to-date has not precluded The Travelers from participating in those discussions. The Travelers elected to withdraw. Manville has not acted in any way to deter any party from securing a fair settlement of these difficult issues.

Respectfully,

G. Earl Parker

G. Earl Parker
Senior Vice President
Law & Public Affairs

cc: Honorable John Erlenborn

Senator NICKLES. Thank you very much, Mr. Parker. I mentioned just a moment ago the Wellington Group study, which, of course, was announced after you submitted your statement. Have you had a chance to review that yet?

Mr. PARKER. The Wellington concept is not something that began 19 months ago. Manville and other defendant companies have been talking about similar structures for at least the past 5 years.

We have not participated in the Wellington Group because our status as a chapter 11 defendant makes it impossible for us to participate in a voluntary settlement facility of that sort. We have taken pains, however, in both the chapter 11 plan of reorganization which has been filed and in our efforts before Congress to be sure that provisions were in those documents to allow a melding of our chapter 11 plan with private initiatives such as the Wellington Group.

We do very much applaud the Wellington effort. We think it is a very positive step forward and we hope very much that what is now a tentative agreement can be brought home to a defined relationship that will at least relieve the burden on the courts.

Senator NICKLES. Could you participate if the bankruptcy judge allowed you to participate?

Mr. PARKER. We think it is possible that the settlement vehicle which we contemplate in our chapter 11 reorganization may be admitted into the Wellington Group as a voluntary participant in that proceeding. There are a great many details to be worked out and some legal concepts which are new here, but we are working in that direction.

Senator NICKLES. The Wellington recommendation excludes Government liability; is that correct?

Mr. PARKER. I am not aware that that is the case, Senator.

Senator NICKLES. It is not fair to ask you in detail, but we will be interested in your response to the study.

Mr. PARKER. I would hope that if it is determined either by Congress or by the courts that the Government should bear a responsibility as though it were a private party that perhaps some private/Government cooperation along the lines of the Wellington solution could be put together.

Senator NICKLES. Here, again, I have not had a chance to be thoroughly briefed on their proposal, but it is my belief there is not a Federal contribution.

Mr. PARKER. Mr. Markusson informs me that you are correct, Senator.

Senator NICKLES. OK.

Mr. PARKER. But neither, I suppose, would the Wellington initiative absolve Government responsibility if the courts determine that there is responsibility. As I understand the Wellington proposal, it is basically a voluntary association by contract of private parties presenting a unified claims adjudication and resolution and payment facility.

Senator NICKLES. You mentioned the Government's potential liability. I think in your statement you mentioned an amount commensurate with negligent actions. Are you talking about a fixed dollar amount or percentage of claims?

Mr. **Parker**. About half of the cases now pending against manufacturers arise from shipyard work either in yards owned by the Government or in work controlled and directed by the Government. So we think that participation by the Government should be in proportion to the number of cases and the Government's actions there; something perhaps less than one-half because there were, as I said, other parties involved in the causation even in the shipyard work.

But certainly a very large responsibility rests with the Government and I think a very large share of the compensation should be paid by the Government. I think in regard to Mr. Vance's earlier comment about what the Government is now paying, I would like to make the point that the Government does pay compensation under FECA.

But the Government then asserts a lien against any other recoveries which that party might receive, so that if an employee of the Government then sues a private manufacturer, the Government stands a very real chance and a good chance of recovering what it has paid out in FECA compensation from any award that a private company might be ordered to pay to that individual. So the Government's contribution is, I think, quite significantly less than Mr. Vance left the impression that it is.

Senator **Nickles**. In looking at the number of claims in the chart that you had up previous to this chart, how many cases have you settled?

Mr. **Parker**. We have settled some 4,130 cases prior to filing chapter 11. At the time we filed, there were about another 17,000 pending.

Senator **Nickles**. How many are pending?

Mr. **Parker**. Another 17,000, in addition to the ones that we had settled.

Senator **Nickles**. How many do you have pending today?

Mr. **Parker**. As a result of filing a chapter 11, claims against the company were suspended. We think if we had not filed, there would be perhaps another 10,000 cases, or something over 30,000 cases pending against Manville Corp. at this time.

The cases are being filed against other manufacturers at the rate of about 500 cases per month. We think, also, that the Government is receiving about 400 administrative claims per month. Mr. Vance did not mention that in response to an earlier question, but in addition to the lawsuits pending against the Government, I understand there are about 12,000 administrative claims by individual citizens against the Government for compensation related to asbestos.

Senator **Nickles**. Mr. Vance, I think I remember hearing something along the tune of 4,000.

Was Manville the nation's largest manufacturer of products containing asbestos during World War II?

Mr. **Parker**. I do not think so, Senator. I do not have that information, but the products about which we are most concerned and the product which has generated the most injuries was a friable magnesium silicate insulation containing about 15 percent asbestos.

That product was developed in Italy about 1895, and because it was extremely well suited for maritime needs, went throughout the European shipyards and came to America, and the Navy was very interested in having that particularly highly efficient product in its ships, both the merchant ships and the warships.

The largest producer of that product initially, and a virtual monopoly of the product, was the United Asbestos and Rubber Company located in Paterson, NJ. From the documents you can find pictures of E Awards which were awarded to UNARCO in that time period.

It is very clear that the Navy was a full partner in the development and manufacture and installation of that product in its ships. It was an extremely beneficial product in terms of saving lives from shipboard fire and in allowing these vast armadas to steam at full speed across the Atlantic to deliver goods and men and munitions to the European theater.

One of my favorate television programs has been "Victory at Sea," and I very vividly recall some of those segments where the U-boats are chasing after the convoys. Without the speed of propulsion that effective insulation gave to those ships, I think it is possible to conjecture that the outcome of the war could have been very different than it was.

Senator NICKLES. You mentioned in your statement that the average figure that you had paid prior to chapter 11 was $7,000?

Mr. PARKER. That is the median figure, Senator. If you arranged all of the claims from the smallest to the largest, the point where the 50-percent claims, the halfway point, would have been $7,500 per case. If you divided the total amount by the total number of claims, the average is closer to $20,000 per case, my point being that there is a wide discrepancy in the payments.

A few at the top receive jackpots, bonanzas. Most of the people receive very little from this costly, frustrating, long-delayed tort litigation system that we are embroiled in.

Senator NICKLES. I believe I heard you say there was not necessarily a direct relationship between the injury and the amount of compensation received.

Mr. PARKER. Yes, sir, if you look on the right side of the chart, you see four plaintiffs at the top representing one-tenth of one percent of all settlements. Those four people received $7,247,000 in total, representing almost 9 percent of the total compensation Manville paid.

If you look at the medical disability associated with those four claimants, it is, I think, really a shocking indictment. One of the claimants, who received over $1 million in a court in Biloxi, MS, received it basically on an argument to the jury that he had a fear of contracting cancer as a result of earlier shipyard work.

Another of those claimants in the top four received over $1 million in California. He had already been awarded a full disability retirement as a result of a broken ankle in his occupation. He was farming 40 acres in Iowa, fully occupied. Yet, the jury awarded him over $1 million.

Senator NICKLES. Do you feel likewise there might have been some people in that $5,000 to $9,000 range that did have a severe disability?

Mr. **Parker**. No doubt about it, sir. There were 24 mesothelioma cases in this group who received no compensation whatsoever, and mesothelioma is the most painful and disastrous of the diseases associated with asbestos.

Senator **Nickles**. And in most cases, fatal within a year or two?

Mr. **Parker**. Yes, sir.

Senator **Nickles**. What is Manville's status now? You have been in chapter 11 for how long?

Mr. **Parker**. About 20 months, and there was an article last week in the Wall Street Journal which reported on the status of negotiations to bring forth a consensual, agreed-upon resolution of our chapter 11 plan. I think the article was very accurate when it stated that the negotiations are close to resolution.

We do have great hopes that this week will be a critical week in those negotiations and that we will be able to get agreement of the major parties involved in our chapter 11 proceedings so that we can emerge and begin paying what we think is our rightful share of compensation in these cases.

Senator **Nickles**. So right now you cannot make those payments?

Mr. **Parker**. We cannot make any payments until a plan of reorganization is confirmed by the court, and that means payments to not only asbestos health claimants, but to the commercial creditors that we owe, as well as our stockholders and other investors.

We need to get a resolution of that chapter 11 plan. We are working very diligently to do that and I think we are within striking distance of doing so.

Senator **Nickles**. Senator Riegle, do you have any comments?

Senator **Riegle**. Thank you, Mr. Chairman. I will just ask a couple because I know we have other witnesses. I will give the remainder to you to answer for the record.

You note that Manville today neither mines asbestos fibers nor manufactures asbestos-containing materials, having divested itself of the last parts of the business during the last 2 years.

What factors were determinative in making the decision to divest yourself of the asbestos business?

Mr. **Parker**. Well, the 17,000 law cases pending against us was a very major factor, Senator.

Senator **Riegle**. Was that the only factor?

Mr. **Parker**. No, not at all. I think, Senator, that knowledge from what has gone on in the past has brought society to the point where asbestos use is safe, is controlled, and no longer represents a hazard. The friable asbestos products, the dust-generating products, have been eliminated from the marketplace.

Asbestos today is used in products exclusively where it is bound in by asphalt, vinyl, cement or some other binder so that the fibers do not become airborne and do not pose a problem. So it was not a concern going into the future with the product.

But given our particular history with this product, we felt that it was not realistic or sensible for a company to go through the agonies of a chapter 11 reorganization and emerge with the same product line that had brought us to that point.

So there were a number of considerations involved, basically a consideration that we wanted to, through chapter 11, pay our claims, discharge our debts, and emerge with a clean slate so that we can continue to employ 20,000 people throughout the United States and the other economic benefits that go along with that.

Senator RIEGLE. Recently, the Commerce Committee, upon which I also serve, reported out legislation under bill No. S. 44 that would alter our product liability laws.

Mr. PARKER. Yes, sir.

Senator RIEGLE. You have mentioned that Manville has been forced to defend thousands of asbestos-related lawsuits and that was the principal reason you decided to get out of the business.

Are you familiar enough with that product liability legislation to know—if its provisions were in effect, say, 10 years ago—would it have affected the course of litigation to which Manville has been subjected?

Mr. PARKER. I think it would have been a very major help, yes, sir, and I do congratulate the committee on reporting out such a well-constructed bill. It certainly would not solve the problem that we are in now.

Senator RIEGLE. Why would it not solve the problem that you are in now?

Mr. PARKER. Well, the cases that we have pending now, I think, would not be affected by the terms of the bill.

Senator RIEGLE. Is that the only thing you were thinking about?

Mr. PARKER. That was what I was thinking about, yes. Going into the future, it should have a very major contribution and bring some new balance to the situation. Under the existing situation, as I alluded to, in the case of the Government, an employer who pays workers' compensation might recover that compensation from the manufacturer of a product which was found to have caused the injury.

Now, in some ways that reduces the obligation of the employer to assure a safe workplace and to assure that products brought in from other manufacturers are used properly and safely in that workplace.

So I think your bill, by eliminating the workers' comp lien on other recoveries, creates a better balance and puts the onus on both the employer and product manufacturers, and I think an onus should be on the employee as well to safeguard health in the workplace. So I think the balance is much improved, sir.

Senator RIEGLE. Let me digress a minute. In the course of the court suits that have been brought by people who have been medically injured, have there been findings of irresponsible decisionmaking by executives at Manville because they permitted the use of hazardous materials in hazardous circumstances while having an awareness of the risks that were involved. Has there been any such finding yet?

Mr. PARKER. That question has been raised in numerous trials and some courts have found one way, some the other way. Some courts have found that the conditions which existed at the time the diseases arose were so callous as to justify the award of punitive damages. Other courts have found that it is entirely unjustified in this circumstance.

Of the some 90 cases that have gone to jury trials, Manville has won about 42 of those. Somewhere around 40 percent of the trials that go before juries, the corporation has won.

Senator RIEGLE. So you have won 40 and lost 60 of the cases that have gone to trial?

Mr. PARKER. I am sorry. I did not hear the question, sir.

Senator RIEGLE. You say you have won 40 percent of the cases that have gone to trial?

Mr. PARKER. Yes.

Senator RIEGLE. So that means you have lost 60 percent?

Mr. PARKER. Yes, sir, and I think it is stating the obvious to say that it is very, very difficult for a corporation to win a case against an injured worker who needs compensation before a jury largely composed of blue-collar workers.

I think the record at least is balanced enough so that the corporation can win on the evidence that it presents before juries.

Senator RIEGLE. Well, you know, it is hard to make an overall judgment. I have great faith in the jury system, and even if you unintentionally slander the jury system to the effect of saying that because blue-collar workers are on it that they are automatically biased against you——

Mr. PARKER. No. I am only saying that——

Senator RIEGLE. I do not know that you meant to leave that inference, but I want to take it off the record whether you put it there intentionally or not because——

Mr. PARKER. I am only saying, sir, that there is a tendency on the part of all of us to want to compensate a person who is disabled, and when one goes before a jury with that tendency already firmly and properly planted in the minds of the jury it is a very difficult thing to win a case. And I think the fact that we have won 40 percent indicates that the evidence is not wholly black, as some would have it appear.

Senator RIEGLE. Well, it sounds to me as if juries are quite capable of making independent judgments. You have lost in 60 percent of the cases and you have prevailed in 40 percent of the cases. I think what that says is that the jury system works and that there are some cases where a jury has found you at fault and others where they have not made that finding.

But I would hope that we would not drift into a state of mind that juries, whether or not they are made up of blue-collar workers, are not likely to give you a fair shake.

I would say to you that those people probably possess the best understanding of what hazards are like in the workplace. Many of us have not had the opportunity to work in really tough industrial circumstances.

I represent a state with probably the greatest concentration of that kind of work. I have had the chance to see an enormous number of health problems, including people being killed on the job, because of the hazardous nature of the work.

So it may well be that to the extent that juries are made up of people who have had to face some of these hazards themselves, it is a useful thing. I would hope that we would not have juries composed only of people who have never been in that situation or only the executive corps that has made some of the decisions. You might then start winning all the cases, but you might start winning them for the wrong reasons.

Mr. PARKER. I would certainly not suggest that.

Senator **RIEGLE**. No, I do not say that you did, but I think it is easy to drift into that mentality. I did not want part of what I heard you say to lend itself to that suggestion, whether you intended it or not.

Mr. **PARKER**. I do think that there are some aspects of jury trials in this sort of mass, multiple claim situation which are certainly less than desirable. It is good to have a jury system there as a totem against which claims are measured.

But I think it is very bad to require case after case after case, with huge expenses and time delays, to go before a jury. I think that the experience that we have had in litigation should allow us to use that knowledge and develop a better system.

Senator **RIEGLE**. Well, I am for expediting. I would agree with you that when litigation extends it over a long period of years in a way where many of the people who have been injured are not even able to resolve their claim in some cases before they die, that is not a very efficient system.

So I would agree with you that on the scale of problems that we see here, we ought to find some way to deal with this in a more expeditious manner. But when you get so many people who have been injured in the sense of a class of asbestos workers, there is a tendency to start thinking about the group and to think less about the individuals.

I do not want us to lose sight of that because the nature of this health damage is so terrible when it occurs. The way in which a person's life is shortened and the way in which a person dies is so awful, and it is intensely personal for that family, that the focus of our policy should be able to respond to the individuals one by one. We should not lose sight of that in terms of a large class of people.

We had a witness at a prior subcommittee hearing on this subject who came in with tubes affixed to his body because of the difficulty we had in breathing and because of the advanced nature of the case.

Mr. **PARKER**. Mr. Vermeulen, whom I am very familiar with.

Senator **RIEGLE**. There are hundreds of others like him who are either near death or who have died, so I do not want to focus on him specifically. I want to say that the nature of the illness and of the death is such that it really one of the awful ways to die.

As a matter of fact, there is even evidence to suggest that a lot of family members of workers who came home covered with these materials have contracted these diseases.

So I would hope that while we solve this problem from a legal point of view that we not lose track of what has happened here because individuals have been hurt.

Mr. **PARKER**. Senator——

Senator **RIEGLE**. Let me just finish.

Mr. **PARKER**. Yes, sir.

Senator **RIEGLE**. We must make sure that there are standards of fair conduct in the private sector and the public sector so that individuals are not put at undue risk without their knowledge, particularly in life-threatening situations.

If they are and if, as a result, they lose their life prematurely through a horrible set of circumstances, there should be a remedy. A remedy is due, whether it comes from you, from a national government/business type system, or from some other scheme that we develop.

But clearly the responsibility exists and I would hope that you would feel that way. I assume you do.

Mr. **Parker**. Senator, I have worked with this problem for 16 years now and I have seen firsthand the suffering that individuals do have, and I have heard witnesses before other committees of the House and Senate relating some of the agony that not only the injured party, but his family, has gone through.

I have had friends of mine working for Manville Corp. who have died of mesothelioma, and I have witnessed that and I quite agree with you, it is a horrible tragedy. I think that we are all here in good faith, trying to bring about a resolution of that, using the individual tragedies, addressing them compassionately, but using them to find a system which will more rapidly and better deliver the money available to the people who need it, and not to continue spending our time and energy and money and resources in this morass of litigation that we are caught up in.

I think, Senator, from your remarks earlier that I sense the same sort of longing and desire on your part, and we would like to be able to help resolve this situation which we acknowledge, having been there and been trying to act responsibly from the inception.

Senator **Riegle**. Well, I appreciate your response. I am going to put the rest of my questions in the record, Mr. Chairman, and would ask that they be responded to for the record.

Senator **Nickles**. Thank you very much, Senator, and thank you, gentlemen, for your appearance before the Committee today.

Mr. **Parker**. Thank you.

Senator **Nickles**. Our next panelist is Kenneth Young, executive assistant to the president, AFL-CIO.

Mr. Young, welcome to the committee. Please proceed.

STATEMENT OF KENNETH YOUNG, EXECUTIVE ASSISTANT TO THE PRESIDENT, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS, ACCOMPANIED BY MARION PARSONS, HEALTH AND SAFETY DIRECTOR, LABORERS INTERNATIONAL UNION, AND CHAIRMAN, OCCUPATIONAL DISEASE TASK FORCE, BUILDING AND CONSTRUCTION TRADES DEPARTMENT; PEG SEMINARIO, ASSOCIATE DIRECTOR, OCCUPATIONAL SAFETY, HEALTH AND SOCIAL SECURITY DEPARTMENT; SHELDON SAMUELS, DIRECTOR, HEALTH, SAFETY AND ENVIRONMENT, INDUSTRIAL UNION DEPARTMENT; AND DONALD ELISBURG, COUNSEL

Mr. **Young**. Thank you, Mr. Chairman. Mr. Chairman, my name is Kenneth Young. I am executive assistant to the president of the AFL-CIO. With me this morning, to my far right is Mr. Marion Parsons, health and safety director of the Laborers International Union and chairman of the Building and Construction Trades Department's Occupational Disease Task Force

To my immediate right is Mr. Don Elisburg, of Connerton, Bernstein & Katz law firm, representing the Industrial Union Department and the Building and Construction Trades Department on the occupational disease issue.

On my left is Peg Seminario, associate director of the AFL-CIO's Occupational Safety, Health and Social Security Department. And next to Peg is Mr. Sheldon Samuels, director of Health, Safety and Environment for the Industrial Union Department.

The AFL-CIO is pleased to be here today to present our views on occupational disease and the need for a federal program to compensate workers and their families for death or disability resulting from work-related exposure to dangerous substances.

This committee is embarking on an investigation that is vital to the well-being of millions of working men and women in this country—an investigation that will help define the type of concern and assistance that our nation offers to those in need; an investigation that should demonstrate our overriding commitment to justice; an investigation that must lead to an adequate, workable system to alleviate the deficiencies in our current scheme of workers' compensation and relieve the suffering of the ever-growing number of victims of occupational disease.

As we have said on previous occasions before this subcommittee, and in our testimony last year to the subcommittee on Labor Standards of the House Education and Labor Committee, the moral and ethical issues raised by occupational diseases are so serious that common sense tells all of us it is time to resolve this problem for the welfare of those who have already been stricken, for those who have been exposed and risk future disability, and for those who will be associated with toxic substances at tomorrow's job site.

Mr. Chairman, we appreciate this opportunity to offer your committee our concerns about occupational disease and our suggestions for an appropriate course of action for the Federal Government.

All of the interested parties in this issue—the millions of workers and their families, the manufacturers, the employers, the insurance industry, the public at large, and the Congress of the United States—are and should be involved in a serious pursuit of solutions to the pressing social, economic, legal and political problems that occupational diseases cause our society.

Workplace exposure to toxic substances has taken and continues to take a tremendous toll. Radiation, asbestos, cotton dust, kepone, vinyl chloride, benzidine, and a multitude of other agents have all been identified as workplace hazards. An estimated 25 million workers are exposed to these and other harmful substances.

Recent scientific reports show that one out of every four blue-collar workers will die from occupationally related cancers. Two hundred thousand deaths will occur from asbestos alone by the end of the century. Twenty-five percent of all smelter workers exposed to arsenic may die of occupational lung cancer, and 35,000 textile workers have been disabled by brown lung.

These estimates only reflect a few well-recognized hazards and do not even touch on such effects as nervous system disorders and reproductive harm which are not being identified as other possible major health problems.

State workers' compensation systems which were designed to deal with traumatic injury and not disease have been woefully inadequate in providing compensation to the victims of occupational disease. Only a very small percentage of the most severely disabled by occupational disease receive benefits, and in the majority of cases only after litigation.

Over 90 percent of those workers who have occupational diseases classified as lung disorders and cancers are forced to litigate their claims before receiving compensation under State workers' compensation systems.

A Federal program is needed to furnish adequate and equitable compensation. Such a program should be comprehensive in scope covering known occupational health hazards and providing coverage to administrative action for additional hazards as they become known.

Such a program should include generous time limits for filing claims, taking into account the long latency periods of occupational diseases, and the program should include presumptive eligibility requirements reflecting the reality that many disabling diseases are caused by work-related exposure to a toxic substance.

As part of a comprehensive Federal response to the problems of occupational disease, companion legislative measures must also be adopted to identify, notify, and diagnose workers who are at high risk as a result of an occupational health hazard.

The National Institute of Occupational Safety and Health should be authorized to carry out medical research to isolate occupational diseases and to assist populations at risk. Occupational disease legislation, to be effective, must not only aid those who are or will become victims of toxic substance disease, but must provide a mechanism to prevent exposure to those substances found to cause these diseases.

Congressional action also is needed to correct the injustice of denying compensation to workers for job-related injury and disease on the grounds of alleged bankruptcy.

The AFL–CIO has long supported the traditional workers' compensation concept of exclusivity vis-a-vis the workers' employer. The certainty of the compensation payment, weighed against the uncertainty of traditional common law actions and defenses, has been the cornerstone of State workers' compensation systems for more than 70 years. There are good reasons for this approach.

Experience has shown that where workers have had to seek redress against their employers in the courts, the time consumed has been extensive, the outcome uncertain, and the awards, when they come, often net the worker very little after lawyer fees and costs. The employer also benefits by knowing the extent of his or her liability through the no-fault system.

The AFL–CIO would urge one exception from this approach. Companies should not have the shelter and protection of exclusive remedy when occupational illnesses related to toxic substances are the result of willful and intentional misconduct.

Any employer who knowingly and/or willfully exposes workers to dangerous substances or dangerous conditions should forfeit any entitlement to an exemption from common law tort suits.

The severity of the occupational disease problem in the United States requires that every means of encouraging preventive action be employed, including the deterrent effect of possible legal action.

Similarly, the traditional third-party worker rights against product manufacturers should not be eliminated by exclusive remedy formulas applicable to employer/employee compensation claims.

Potential manufacturer liability has proved to be a major incentive for high standards of testing and production, as well as comprehensive notice of possible hazard. Removing product manufacturers from court liability will strip employees and their employers of much needed protection. Workers and their employers must be entitled to their full rights against such manufacturers for additional damages, including pain, suffering, loss of consortium and punitive damages, as appropriate.

Mr. Chairman, my testimony summarizes the AFL-CIO's views on the pressing need for comprehensive legislation covering occupational diseases. Attached to my testimony are more detailed statements prepared by the AFL-CIO's Building and Construction Trades Department and the Industrial Union Department.

These two departments and the AFL-CIO are in full agreement on our proposed remedies for this growing national problem. I would request that the statements of the Building and Construction Trades Department and the Industrial Union Department be considered part of the AFL-CIO's testimony and included in the record of these hearings.

Thank you.

Senator NICKLES. They will be included in the record.

[The statements referred to follow:]

STATEMENT OF KENNETH YOUNG, EXECUTIVE ASSISTANT TO THE PRESIDENT, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS BEFORE THE LABOR SUBCOMMITTEE OF THE SENATE LABOR & HUMAN RESOURCES COMMITTEE

May 21, 1984

Mr. Chairman and members of the committee. The AFL-CIO is pleased to be here today to present our views on occupational disease and the need for a federal program to compensate workers and their families for death or disability resulting from work-related exposure to dangerous substances.

This committee is embarking on an investigation that is vital to the well-being of millions of working men and women in this country; an investigation that will help define the type of concern and assistance that our nation offers to those in need; an investigation that should demonstrate our over-riding commitment to justice; and an investigation that must lead to an adequate, workable system to alleviate the deficiencies in our current scheme of workers' compensation and relieve the suffering of the ever-growing number of victims of occupational disease.

As we have said on previous occasions before this Subcommittee, and in our testimony last year to the committee on Labor Standards of the House Education and Labor Committee, the moral and ethical issues raised by occupational diseases are so serious that common sense tells all of us it is time to resolve this problem for the welfare of those who already have been stricken, for those who have been exposed and risk future disability, and for those who will be associated with toxic substances at tomorrow's job site.

Mr. Chairman, we appreciate this opportunity to offer your committee our concerns about occupational disease and our suggestions for an appropriate course of action for the federal government. All of the interested parties to this issue -- millions of workers and their families, the manufacturers, employers, the insurance industry, the public at large, and the Congress of the United States -- are and should be involved in a serious pursuit of solutions to the pressing social, economic, legal and political problems that occupational diseases cause our society.

Workplace exposure to toxic substances has taken, and continues to take, a tremendous toll. Radiation, asbestos, cotton dust, kepone, vinyl chloride, benzidine and a multitude of other agents have all been identified as workplace hazards.

An estimated 25 million workers are exposed to these and other harmful substances. Recent scientific reports show that one out of every four blue-collar workers will die from occupationally related cancers; 200,000 deaths will occur from asbestos alone by the end of the century; 25 percent of all smelter workers exposed to arsenic may die of occupational lung cancer; and 35,000 textile workers have been disabled by brown lung. These estimates only reflect a few well recognized hazards and do not even touch on such effects as nervous system disorders and reproductive harm which are now being identified as other possible major health problems.

State workers' compensation systems, which were designed to deal with traumatic injury and not disease, have been woefully inadequate in providing compensation to the victims of occupational disease. Only a very small percentage of the most severely disabled by occupational disease receive benefits -- and in the majority of cases only after litigation. Over 90 percent of those workers who have occupational diseases classified as lung disorders and cancers are forced to litigate their claims before receiving compensation under state workers' compensation systems.

A federal program is needed to furnish adequate and equitable compensation. Such a program should be comprehensive in scope, covering known occupational health hazards and providing coverage, through administrative action for additional hazards as they become known. Such a program should include generous time limits for filing claims taking into account the long latency periods for occupational diseases. And, the program should include presumptive eligibility requirements reflecting the reality that many disabling diseases are caused by work-related exposure to a toxic substance.

As part of a comprehensive federal response to the problems of occupational disease, companion legislative measures must also be adopted to identify, notify and diagnose workers who are at high risk as a result of an occupational health hazard. The National Institute of Occupational Safety and Health (NIOSH) should be authorized to carry out medical research to isolate occupational diseases and to assist populations at risk. Occupational disease legislation, to be effective, must not only aid those who are, or will become, victims of toxic substance disease, but must provide a mechanism to prevent exposure to those substances found to cause these diseases. Congressional action also is needed to correct the injustice of denying compensation to workers for job-related injury and disease on the grounds of "alleged" bankruptcy.

The AFL-CIO has long supported the traditional workers' compensation concept of exclusivity vis-a-vis the workers' employer. The certainty of the compensation payment, weighed against the uncertainty of traditional common law actions and defenses, has been the cornerstone of state workers' compensation systems for more than 70 years.

There are good reasons for this approach. Experience has shown that where workers have had to seek redress against their employers in the courts, the time consumed has been extensive, the outcome uncertain and the awards, when they come, often net the worker very little after lawyer fees and costs. The employer also benefits by knowing the extent of his or her liability through the no-fault system.

The AFL-CIO would urge one exception from this approach. Companies should not have the shelter and protection of exclusive remedy when occupational illnesses related to toxic substances are the result of willful and intentional misconduct. Any employer who knowingly and/or willfully exposes workers to dangerous substances or dangerous conditions should forfeit any entitlement to an exemption from common law tort suits. The severity of the occupational disease problem in the United States requires that every means of encouraging preventive action be employed -- including the deterrent effect of possible legal action.

Similarly, the traditional third-party worker rights against product manufacturers should not be eliminated by exclusive remedy formulas applicable to employer/employee compensation claims. Potential manufacturer liability has proved to be a major incentive for high standards of testing and production as well as comprehensive notice of possible hazard. Removing product manufacturers from court liability will strip employees and their employers of much needed protection. Workers and their employers must be entitled to their full rights against such manufacturers for additional damages including pain, suffering, loss of consortium and punitive damages as appropriate.

Mr. Chairman, my testimony summarizes the AFL-CIO's views on the pressing need for comprehensive legislation covering occupational diseases. Attached to my testimony are more detailed statements prepared by the ALF-CIO's Building and Construction Trades Department and the Industrial Union Department. These two departments and the AFL-CIO are in full agreement on our proposed remedies for this growing national problem. I would request that the statements of the Building and Construction Trades Department and the Industrial Union Department be considered part of the AFL-CIO's testimony and included in the record of these hearings.

Thank you.

STATEMENT OF THE INDUSTRIAL UNION DEPARTMENT, AFL-CIO

HOWARD SAMUEL, PRESIDENT

Mr. Chairman and members of the committee. On behalf of the Industrial Union Department, AFL-CIO, we are very pleased to be here to discuss some of the difficult problems workers face when they are exposed to toxic substances and processes. We also want to make clear that we support legislation to provide for realistic compensation for those who develop an occupational illness from exposure to these harmful substances.

As stated in the companion testimony of the AFL-CIO, occupational disease is a many-faceted workplace problem. The focus of public attention has been on cancer and asbestos because of the enormous, well-publicized impact it has had on thousands of workers exposed to that substance. Nonetheless, rubber workers who develop leukemia from benzene, plastics workers who develop liver cancer because they must breathe vinyl chloride, miners who die of lung cancer because of ionizing radiation, electroplaters who breathe cadmium fumes and die of prostate cancer--all sicken and die just as easily as men and women exposed to asbestos.

Their suffering and the suffering inflicted upon their families should not be less because their tragedy draws less attention in the media.

Cancer is not our only occupational disease. Cotton dust disease, nerve destroyed by lead, mercury and solvents; all are worthy of our concern.

The problem of these diseases has been the focus of attention in hearings and proposed legislation before this committee on numerous occasions in the last 15 years. It was testimony relating to occupational disease, including testimony concerning asbestos and cotton dust exposure, that was a major impetus behind the enactment of the Occupational Safety and Health Act of 1970 (29 U.S.C. 660) (OSHA). The OSHA Act also created a National Commission on State Workermen's Compensation Laws to study the many problems then existing with state workers compensation programs.

The Commission reported in 1972. In several sessions of Congress following the report, this Committee considered legislation designed to provide a program of Federal Standards for State Workers compensation programs. During each of those hearings, representatives of organized labor have come before this Committee with overwhelming evidence of the seriousness of the occupational disease problem and the need for some kind of federally mandated program to provide adequate compensation to workers who fall victim to diseases after exposure to toxic substances. Thus far, legislation has not been enacted.

We believe that this Committee has sufficient information before it from its prior investigations to recognize that the effects of toxic processes and substances on workers health must be the subject of a fair and equitable compensation scheme. A legislative solution must include coverage for those known toxic substances and processes for which populations of workers and bystanders for whom excessive rates of occupational disease have been identified; and, also include a mechanism for coverage of additional affected populations as they are identified. It is important that the latter mechanism be reasonably well-defined. Our experience with rule making for toxic substances and processes under other statutes, e.g. OSHA and Toxic Substances Control Act (TSCA) has shown that promulgation of effective standards is seriously hindered absent specific statutory Congressional direction.

A number of major considerations are involved. First, any legislative direction has to make clear the executive agency's responsibility to promulgate a suitable regulation in a specific time frame. Workers cannot become caught in the cross-fire of inter-agency disputes and suffer long delays in obtaining relief. For those populations already recognized outside of well documented occupational diseases such as asbestosis and cancer from exposure to asbestos, byssinosis among cotton textile workers, and benzidine-induced bladder cancer, the Congress should provide the necessary standards, or set a maximum time limit for coverage of diseases and workers under any legislation.

Second, in addition to specifying certain known diseases as qualifying for compensation, legislation should direct the executive agency to identify coverage of additional discrete occupational diseases and populations at risk of occupationally attributed disease which consider duration and intensity of exposure, specific diseases and specific areas or organs of the body to be covered, and the required medical determinations to be considered.

We believe that it will not be difficult for appropriate agencies such as NIOSH to make determinations for populations of workers exposed to toxic substances and processes that reflect the increased burden of risk of these workers developing occupational disease. Those who have borne this risk and developed cancer or other diseases because they are coke-oven workers, welders, textile workers, uranium miners, painters or oil refinery workers are no less entitled than workers with more well known occupational diseases to compensation.

Mr. Chairman, this is no wishful thinking about problems down the road. As is amply shown in my colleagues' testimony this morning, there are afflicted workers and their families who need help now. There are a number of high-risk populations which should be covered in legislation as passed, or certainly included within a short period of time after passage of any bill.

II

Let me now turn to a more specific explanation of the mechanism for including a particular toxic substance or process in a compensation scheme.

The existing state workers' compensation systems have failed to fairly compensate, usually to compensate at all, victims of occupational disease. It is important to know why this is the case.

One reason the compensation system has failed is because two fundamental concepts essential to understanding disease have not been adequately reflected in law.

The first concept is that disease cannot be explained in terms of simple, single causes and simple, single effects. The causes of disease are many and complex. So are the associated effects. Because most of us have this simplistic idea in mind when we use the term "cause," there is a growing consensus among scientists that the term should no longer be used either in scientific or lay publications. They suggest the term "risk factor" instead.

The second concept has been called "population thinking." This is a way of understanding each of us by looking at populations, that is groups to which we each belong because of some shared characteristic (such as our job or exposure to a toxic substance).

This kind of thinking has shaped the information we have received from the scientists in modern times. Statistical methods have become very important in gathering and analyzing the information as it comes to us, but few laws or proposed laws have been written with this reality in mind.

Whether we are struggling with the problems of causation or trying to understand what occurs in a population, we have to deal with information as the scientists gives it to us. We must not ask that it be twisted to fit obsolescent language in our laws. Instead, we must change the law to fit the current state of science.

Compensation law has not been totally insensitive to these understandings. Thus, the terms "due to," "arose out of," "but for," and "the cause" usually found in compensation law should be retained only if they have been clearly qualified. One way this has been done traditionally is by the use of "presumptions."

Used fairly and consistently, presumptions defined and utilized within a compensation system will reduce reliance on the tort system. They bridge the gap created by the uncertainty characteristic of scientific investigation and the ethical certainty that just claims, i.e., claims for disability and death more likely than not attributable to the workplace, must be paid.

For example, it is appropriate to create a presumption that asbestosis is caused by breathing asbestos because the typical scarring of the lung and calcification observed by the physician is found among significantly large numbers of exposed workers. The chance is very small that an excessive incidence or prevalence of the same conditions can be found in populations of workers in the absence of asbestos exposure.

A similar presumption is warranted for mesothelioma. Mesothelioma has in fact been associated with other fibers and, in animals, with some chemicals. But except for these rare circumstances, the cases studied have been associated with asbestos exposure at work or among the families of asbestos workers and other bystanders.

In the case of asbestosis and mesothelioma, a burden of risk of disease was added by the asbestos exposure for each and every worker in the population, even though the majority of those in the exposed population do not develop the disease. The size of the added burden varies, for example, with duration, extent and age at onset of the exposure, plus other environmental risk factors. Where the environmental factors are the same, the added burden of risk attributable to asbestos is the same and distributed uniformly throughout the entire group of workers. Other factors determine whether and when a worker actually becomes ill.

The principle of added burden of risk must be applied consistently. There are no special rules of nature that set mesothelioma, for example, apart from cancers found at other sites.

Among asbestos insulation workers, regardless of personal differences such as whether they smoked or not, the risk of lung cancer associated with the exposure was more than five times the risk of lung cancer found among workers not exposed to asbestos. The added burden of risk is the same for the entire exposed population--even though the entire population will not contract lung cancer--and, therefore a presumption is justified for those that do contract lung cancer.

The same case can be made for asbestos-exposed insulation workers who suffer from cancer at other sites (oropharynx, larynx, gastrointestinal tract, ovary, or kidney).

There are no special rules of nature reserved for the effects of asbestos. The principle of the added burden of risk applies to all of the toxic substances and processes and the analysis of the same.

A systematic way must be required to assess risk for all populations of workers, a generic approach to trigger all identified populations with a high risk of occupational disease.

We believe that the "trigger" has these elements:

1. An agent, process, or job found toxic from (a) observation of human populations or (b) animal and laboratory research.

2. Estimates of significant excess risk (30% or greater) of death or disease in specific areas or organs of the body (site specific) in the populations exposed to the agent, process or job.

3. Based on evaluations of (1) and (2), the appropriate agency makes a determination that a significant, elevated risk has been found in a population for workers who have (i) established membership in the population, (ii) have manifest disease, and (iii) experience sufficient exposure approximating that which results in a risk of disease in excess of 30% compared to similar workers without exposure and, that such exposure to such toxic substance or process is compensable under the legislated program.

The 30% benchmark is utilized for the imposition of the "trigger" because it is a level of risk for which the statistical data is available and widely accepted as reflecting an added burden of risk attributable in the workplace and therefore a burden of risk for which compensation should be paid.

III

We would like to make clear that our interest is not just in compensation alone. The basic process of risk assessment useful in a compensation scheme is also important and has application in the reduction of suffering and death.

One of the most important realities repeatedly established for environmentally induced chronic disease is the long period of latency between the onset of effective exposure and the first evidence of the disease. This "silent period" between initial exposure and the discovery of disease is of more than theoretical interest. It offers an opportunity, a possibility that intervention during this time might be successful in breaking the chain of events between exposure to an agent and the onset of uncontrollable disease. For cancer alone, the American Cancer Society estimates that nearly a third of the expected deaths could be prevented by existing clinical methods of early detection and treatment. There is even some evidence of reversing the development of disease before it is found when the exposure has been stopped. Consequently, an integrated program of early detection is an urgent need including the identification and notification of high-risk groups, resources for the diagnosis and verification of disease effects, community and family resources for continuous and lifetime surveillance, and referral and counseling.

Neither compensation nor preventive intervention will effectively aid workers at high risk without requirement of these additional steps:

1. Expand the federal research effort, coordinated by NIOSH, to identify and define worker populations at high risk of contracting environmental or occupational disease.

2. Aurhorize NIOSH to establish a set of federal criteria for environmental health centers staffed and equipped for medically screening, monitoring, and counseling individuals in high risk populations. Such centers should be located and organized in existing community health care facilities, and provided with short-term professional staff education.

3. Create a federal program to notify individuals within high risk populations that they are at risk because of an environmental exposure, and to refer them to environmental health centers that meet federally recommended criteria.

4. Require private or public health insurance or other medical care programs to eliminate occupational exclusions in order to maintain existing benefits and entitlements covering examinations of high risk individuals who are notified by the federal government.

5. Establish a strict set of worker and other individual protections against 1) employer discrimination on the basis of identification of being at high risk, and 2) abuse of genetic and other medical data.

We believe that these elements are essential to an effective program of occupational disease prevention. We cannot focus totally on compensation without bringing to bear an understanding of this need as well.

Mr. Chairman, the Industrial Union Department joins the AFL-CIO and the Building Trades Department in underscoring the importance of enacting appropriate legislation at the earliest possible time. The evidence of the harm has been amply demonstrated in previous hearings and by the witnesses thus far in your own hearings. There is no longer a question of Congress determining that we have a problem. The asbestos catastrophe alone demonstrates the need. The work before the Congress should be to develop and enact a workable solution. To that end we stand ready to assist this Committee in any way possible.

STATEMENT OF BUILDING AND CONSTRUCTION TRADES DEPARTMENT, AFL-CIO

ROBERT GEORGINE, PRESIDENT

Mr. Chairman and members of the committee. I am very pleased to join with my colleagues from the AFL-CIO and the Industrial Union Department to testify on behalf of the Building and Construction Trades Department. For many, many years, construction trade union members, journeymen, and laborers have been aware of the traumatic injuries they could incur due to the dangerous nature of their work. However, in recent years we have also begun to see the emergence of diseases in construction workers caused from exposure to the very materials that they have carried, mixed, formed, cut, shaped, or even removed and repaired. Consequently, our members are becoming more and more concerned with the impact of the conditions of their workplace on their health, as well as their safety. We feel that it is time that we express, along with our fellow trade unionists, our concern about the need for federal legislation to address the problems involved in protecting all workers against exposure to these disease-inducing materials.

I believe that now is the time for everyone concerned about the problems created by hazardous materials in the workplace to accept the responsibility for the solutions to these problems. This acceptance of responsibility inclues identifying the past and present job-site exposures of workers to these hazardous materials. It should also include full and fair compensation to the diseased workers, and elimination of the dangerous work practices that cause exposure to these materials. No facet of our society can be complacent because it has solved its individual piece of the problem. We need legislation that would mandate identification of all potential victims of occupational diseases, and devise a system for early detection of occupationally-related diseases. Such legislation must also make allowances for financial restitution to diseased workers and their families.

This is not a matter of abstract concern to the trade union movement. The need to evaluate and design a comprehensive approach to the identification of present and latent victims of occupational diseases has long been recognized. I also realize that as solutions begin to evolve, the potential for conflicts will arise. This is because there are so many interested parties associated with the problem ----- labor, management, the public, the insurance community, manufacturers, and producers. We all are now aware of the impact of one such disease, asbestos and asbestos-containing products, have had on the health of people exposed to them. The financial burdens from insurance claims, health and welfare services for asbestos exposure victims, and the costs of litigation are now a matter of record. There is a pressing need to identify and provide an intervention which might alleviate the pain and suffering that can follow the incubation of the dread diseases arising from exposure to asbestos and the many other toxic substances that our members find each day in their workplaces.

All of us in construction remember the decade from 1960-1969; more than 40,000 tons of fireproofing material were sprayed annually in buildings under construction. The estimate today is that more than one **million** tons of asbestos materials remain in place aboard ships, in buildings, and in process industries. We know that asbestos dust can fill the air when it is disturbed or damaged. Fortunately, we have promoted the use of better work practices and engineering controls through our apprenticeship and training programs to minimize the exposure during removal or repair of in-place, friable asbestos.

Laborers, Asbestos Workers, Painters, and others are exposed in rip-out work; I could name every International Union in the Building Trades, and I'm sure that those individual unions could provide additional situations of exposure.

Boilermakers, like other craft unions, have lodges or locals that represent workers in an industrial setting; but they have also worked on construction sites where it has been estimated that 10,000 to 20,000 tons of asbestos were applied annually to pipes, boilers and other high-temperature equipment in factories, refineries, and power plants.

We have tried to control the exposure of construction workers to in-place asbestos during rip-out work by encouraging the development of specialty contractors to do this work, and discouraging the use of contractors without experience and knowledge.

Researchers at the Mount Sinai School of Medicine have estimated that 7.5 million construction workers are at some degree of risk in developing an asbestos-associated disease. Within the next 20 years, annual excess deaths from asbestos-related lung cancer just among construction workers are estimated to range from 1,405 persons to 1,893. When other cancer deaths are projected, it adds an additional 1,000 to 1,500 deaths to these totals.

There are also other toxic substances in the workplace, the effects of which must be considered in any legislative compensation program. Not so many years ago, Ironworkers would bring bottles of milk to the job when they were welding. They would drink the milk, mistakenly thinking that it would reduce the nausea they would incur from welding either galvanized steel or steel that had been painted with lead-based paint.

That method didn't work very well, but it is an illustration of the immediate and violent reaction of a respiratory system that is being overloaded with toxic welding fumes. When welding is done in confined spaces by trades like Plumbers and Pipefitters, for example, the toxic atmosphere problem becomes magnified. NIOSH has listed deaths due to respiratory disabilities as the **number one** CAUSE OF DEATH AMONG THE OCCUPATION DISEASES CONTRACTED BY WORKERS.

In the construction trades, Painters are exposed to the fumes of paints and solvents; Roofers are exposed to coal tar pitch and asphalt fumes, as well as solvents; Tile Setters, Plasterers, Cement Masons, Carpenters and Bricklayers are all exposed to mixtures and epoxies from which toxic fumes, dusts and mists can evolve. Laborers handle bags, barrels, boxes, cans, drums, cylinders and other containers which may contain hazardous substances. And all crafts on a construction site can be exposed to airborne toxic contaminants. Ironworkers, Pipefitters and Plumbers cut, weld and heat materials coated with paint and anti-corrosive materials that release toxic vapors. Carpenters, Operating Engineers, Electricians ------ pick any craft in the Building and Construction Trades, and you will find a group of construction workers that has potential exposure to these toxic substances.

It is against this background of danger that a special Building and Construction Trades Department Committee was appointed early last year to study and coordinate efforts with other AFL-CIO departments on all legislation concerning occupational diseases programs. That committee developed several basic questions about such legislation. They are:

(1) How will our members who have been and are potential risks to exposure, gain entry to any system devised to meet their health, economic and social needs, not only for themselves, but for their families when the members are deceased, or worse yet, suffering a "living death"?

(2) What will be the mechanism to identify, label and define the very best procedures and equipment needed to protect those who are presently exposed at their workplace, or those who may face work assignments in the future that will expose them?

(3) How can we insure that such a program will be adequately financed?

(4) How can we insure that such a program will be adequately administered?

(5) How can such a program be designed so that it will become the catch basin for **all** such future occupational disease problems as may arise, and not be done on a piecemeal basis as we have done in the past, and then **only** after there has been great suffering by our working people?

(6) How can we insure that the total delivery system will not be outmoded and constantly require upgrading in the future to serve the people who will be dependent on it?

That occupation disease committee report indicated that an occupational disease bill is necessary and will offer an opportunity for substantial improvement over the present situation, and a great deal of opportunity for real progress towards the day that our country will achieve a comprehensive occupational disease program for working people who are disabled or die as a result of an unsafe or a harmful health environment in the workplace. Our comments are offered in this spirit. The testimony of the AFL-CIO in this and other hearings has outlined in detail the reasons why a legislative effort to provide a comprehensive occupational disease act is so critical to American workers. The statement of the

Industrial Union Department has outlined in detail our mutual concern for a legislated "trigger" mechanism that will include additional occupation diseases in a compensation program.

I would like to comment more specifically on the mechanics of financing an occupational disease compensation program. The funding of any proposed occupational disease legislation is of particular importance to both construction workers and their employers. Construction is an occupation with a high degree of mobility. Most of our members work for many different employers during their normal career. Long ago our industry set up multiemployer health and pension funds to accommodate this mobility.

With the long latency periods and multiple exposure problems associated with occupational dieases, we believe that it is essential to have a financing system that will fairly compensate our workers who are made ill and not place the entire cost burden on the "last employer", whose involvement may be minimal. There is serious doubt whether the present state compensation systems can continue to respond to occupational disease claims of the future.

We believe that the responsibility for compensating the workers and their families made ill through cumulative exposures to toxic materials and substances should be placed squarely on those who are responsible for the harm. Any mechanism for paying compensation should place the burden of payment on the manufacturers of the toxic substances. Because of latency and multiple exposure factors, it is appropriate that a compensation fund be created that will have an industry-by-industry orientation.

We do not believe that the American public should pay for the workplace disability cause by exposure to toxic substances.

We recognize that there are many possibilities for funding mechanisms. This is a complex issue, and we would be willing to work closely with any and all groups to develop a mechanism that will provide a certainty of payment, resonable financing, and a fairness of process to the affected workers and their families.

Mr. Chairman and members of the committee, this is a very serious effort you have started. It means a great deal to our membership in the AFL-CIO. As we have stated, it is not an abstract position for us. It is an urgent need, and we hope that Congress will be responsive to this urgency.

Senator NICKLES. I want to thank you for your statement and also compliment you. You are the first witness we have had today that stayed within the 10 minutes and we are running on a tight time scale.

Senator Riegle, do you have any questions?

Senator RIEGLE. Yes, Mr. Chairman. First of all, I want to say that we welcome the statement that you have given today and I think you have made some important points that the subcommittee and the full committee need to consider carefully. I think I can say that they will be considered carefully.

Much of the testimony received before this committee has focused on asbestos-related diseases. Some have even suggested that asbestos-related diseases pose the only problem that might merit legislative attention.

I am wondering what other non-asbestos-related occupational diseases your members contract, and whether you can help us understand a little more broadly what is going on out there.

Mr. YOUNG. Senator, I think we mentioned some in the testimony, and I know others are mentioned in the testimony of both the Building Trades and the Industrial Union Department.

I think what we are concerned about primarily is that there has to be some way of taking a look at what is going on in this country, what is happening with toxic substances, and the high risk factor involved with workers who are exposed to those toxic substances and then come down with a disease.

That is the basis, of course, of what we are talking about. What we are getting to is a form of presumption for excessive risk standards. We are saying that in many cases, if you study a population at large, you can see that being on a given job has a much higher risk than someone outside of that given population.

Therefore, you take that excessive risk standard into consideration when you are looking at the final effect. Is there someone who wants to talk about specific diseases?

Senator RIEGLE. Yes, I think it would be useful for us to hear what the two or three other major hazards are that you see here other than asbestos directly.

Mr. SAMUELS. Thank you very much. There are a number of other major populations put at risk by toxic substances. Benzene, for example, puts nearly 3 million workers at risk. Now, this does not mean that 3 million workers develop leukemia; only a very small percentage do, but it is a very large population.

There are other very large populations. For example, workers exposed to nickel oxides——

Senator RIEGLE. Nickel oxides?

Mr. SAMUELS. Yes, 1.4 million.

Senator RIEGLE. And what are the diseases that arise from the exposure to nickel oxide?

Mr. SAMUELS. Cancer.

Senator RIEGLE. Cancer, principally.

Mr. SAMUELS. There are a number of substances that cause diseases other than cancer. There are a number that have been identified in the literature that are associated with heart disease. These include nitrates, some solvents, fluorocarbons, antimony, arsene, carbon disulfide, carbon monoxide, et cetera; metals—lead and cadmium—which is also a carcinogen—and physical agents, such as noise, some forms of radiation, heat and cold.

Senator RIEGLE. Now, is there any way that we have at the moment to take this growing body of information and factual data—to craft legislation to deal with this problem on a more generic level, so that we do not just catch up after the fact with the asbestos case or benzene case or something else?

Is there some way now? Is there enough of a body of information showing enough hazards of this kind that we are in a position to take an intelligent step in the national interest? In other words, do we have sufficient knowledge to protect our workers, to protect our environment, to keep our people well and healthy so they are not dying prematurely or incurring enormous health bills? What lessons can we draw at this point, I wonder?

Mr. SAMUELS. For the 18 substances which even management scientists, for example, consider to be human carcinogens, research has identified populations exposed to these substances and individuals within those populations who run a 30-percent or greater excess risk. Compensation of these populations is easily handled by legislation that creates a trigger that uses that kind of information.

In addition to those 18, there are probably 20 or 30 other carcinogenic substances to which identified populations are or have been exposed. Now, one of our problems in identifying high risk populations is that we do not always know the toxic substance, but we are able to identify the toxic process. Isopropol alcohol refining is a very good example. Coke oven workers are exposed to lots of chemicals in that process which have been identified as carcinogens.

So there are many toxic processes and substances to which populations of workers have been exposed. The studies have been done; more studies need to be done. I think that these studies in combination with a very simple formula—we call it a 30–30 formula—a population with a demonstrated risk in excess of 30 percent and an individual, who on the basis of the extent and duration of his exposure, can demonstrate an additional 30-percent risk for himself or herself personally—that combination seems to be a fair, easily scientifically acceptable basis for compensation.

Senator RIEGLE. Yes; go ahead.

Miss SEMINARIO. I would just like to make one other point, and that is since 1970, with the passage of the OSHA Act, the Federal Government has been taking a role in evaluating scientific evidence for the purpose of limiting exposures.

It seems to us that if, indeed, we can look at scientific information, whether it is on asbestos, cotton dust, lead, vinyl chloride, all of which have been regulated by the Government, and say, based on that information—and in most cases, it is human evidence, based on human epidemiology—require that companies spend a lot of money, in the millions of dollars, to control those exposures, then, indeed, there is sufficient evidence to take the next action, which is to compensate those victims who have already developed the diseases.

Scientific evidence has been used to require very major expenditures by companies to protect workers in the future, but yet we have done nothing to use that same evidence to compensate victims who have already developed the diseases.

Senator **Riegle**. It seems to me that, particularly in times past, where the health hazards were not fully known or the effort to determine the health hazards was not sufficient, it is not surprising that more was not done to protect workers. Moreover, because of the sheer competitive pressures, one company that might spend more money with workplace protections and various other devices might incur cost premiums that would make it, in the short run at least, less competitive.

Maybe it could not survive on that basis, so that there would be a profit incentive to cut corners in order to squeeze down product costs and to increase output. I mean, that is the nature of how the system works.

What I am suggesting is that when we have reached a point today where we find that we have a class of health victims who have suffered because of these past circumstances it probably is not enough to look just to the private sector for a remedy, partly because some of those firms no longer exist. They have gone out of business. The health damage has been done, but the firm has vanished. The executives or others who might have been part of the decisionmaking have disappeared.

It seems to me that we do need to establish some kind of a rational compensation system to aid these people who have been poisoned in different ways without their knowledge.

As these cases are uncovered and as we find that there are large classes of people affected, there must be some kind of remedy and some kind of compensation, obviously starting with the medical bills.

And why is that important? Because it is the kind of Nation we are. We are not just a selfish Nation of individuals who care nothing about what happens to the person next door. The whole notion of our Nation is that we are quite different from that and that we are not just going to operate on an ethic of personal selfishness.

I realize that is sort of a popular ethic today in this town with this administration, quite frankly, but that is not enough for the country. We do have an obligation to each other and we are, in effect, a national family. If we have a class of victims, then we want to respond.

That is our natural impulse, and it is a proper one. When we have floods, for example—we are experiencing floods right now out in the western States—we have emergency flood relief that is available. We had the situation with Mount St. Helen's before, and emergency relief was made available. The reason that people from Michigan and from the east coast are prepared to help people in the western part of the country is because we are tied together as a Nation.

Precisely the same national view has to permeate and reach this problem.

We have a class of victims of different kinds of health hazards out of workplace situations that are scattered around the country who desperately need help. In many cases, they are destitute because of the medical bills that they have incurred. Their lives are ending prematurely.

We have to have a way to identify those people and to see to it, in the broad national interest, that their basic needs are met. Compensation for them should exist because they have suffered some kind of very severe medical illness that is related to their occupation.

Now, I hasten to add that I think the principal responsibility falls to the companies involved. They made the operating decisions that set up the situations in which these risks were created and these health damages were caused.

So I think there is a proper obligation to go first to those particular decisionmakers and those economic entities that have caused this to happen. But that may not prove sufficient. I think there is a broader public responsibility to be factored in here.

It is essential that we develop for ourselves a remedy that reaches way beyond asbestos, because asbestos just happens to be exhibit A. That is only one of the cases with which we are now very familiar.

I am convinced today that there are new kinds of toxic substances that have been created and are loose in our environment and in various workplace settings. We are probably creating whole new classes of individuals in work settings who are going to manifest serious health problems at some point.

The agent orange case is a case in point. They have just changed the safe fish levels on PCB's for fish in the Great Lakes because of that toxic substance. You can be certain that we have other accidents that are happening on a scale that may equal the asbestos problem in the future.

So we have to have a way, as a Nation, to prevent these tragedies and, when they happen, to respond to them adequately.

I am just wondering if this would be a view that any of you would want to comment on.

Senator NICKLES. That is a good question.

Mr. PARSONS. I would like to comment, Senator. From the Building Trades Department standpoint, for the Senator from Oklahoma's information, I was raised in a little town tucked up in the northeastern corner of your State, Ottawa County, and I escaped from those mines in 1935 because we went out on strike and never did go back to work.

But I had two brothers that died as a result of silicosis, which turned to what we call miner's con, from the work in those mines.

Senator NICKLES. Miner's what?

Mr. PARSONS. Miner's con, consumption.

Senator NICKLES. It was not pneumoconiosis?

Mr. PARSONS. No; it was caused by the dust. In those days, the mines were a little different.

But in the building trades, we face the same kind of problem. NIOSH has just put out a new publication with a list of carcinogens, which I think both Peg and Shelly ticked off for you.

The thing that you mentioned, Senator Riegle—we find in the building trades that we do not have quite the same control over the work environments that you have in the industrial sections like Detroit in the automobile plants. So engineering controls are not quite as applicable to us, although we support them fully. So we depend an awful lot on protective devices.

But we are finding more and more problems. Just this morning I was talking to a roofer's representative. He just returned from

Philadelphia because they were having a lot of problems with the new waterproofing and damping process. It was a roofer, not a painter.

He was telling me about the problems in this new compound that they were using; that they did not know what was in it. One of the guys had passed out on the job. When this substance enters the respiratory system and these kinds of things—so they finally found that they should go to a very good respirator and it alleviated the problem.

But we do not know what the after-effects of that kind of exposure would be over a long period of time and what it might lead to. But we suspect that it will be the same as agent orange and radiation and a lot of other things.

So we are using that approach that I think this committee is taking and the committees in the House are taking that we need a comprehensive piece of legislation which will cover all of these bases on a generic basis, which will have the triggering mechanisms, the presumptions that are needed, because those so-called blue-collar workers that you talked about a while ago—God Almighty, there are an awful lot of barriers to those people getting entry into these systems which we have that are supposed to work so well for them, and we know that and we do not do too much about it.

But whatever we do, we want to make sure we do not make the same mistakes we have made in the past. The record shows that the labor movement, per se, looked at exclusivity a long time ago—1910, 1911, 1912. The State of Maryland, which is my home State now, was one of the first to pass a workers' compensation piece of legislation, and I hesitate to tell you it is still not working too well today.

But in these areas what we need is a system which contains a generic approach with a process for other chemicals to be added as we know that they are causing diseases to our people, and they will manifest themselves; we are sure of that.

Senator NICKLES. Thank you. Yes?

Mr. ELISBURG. Senator, one point you made that I think goes with the process of any proposal in dealing with occupational illness or disease is most of what impacts on a worker is not in the traditional injury sense of happening with one employer at a time certain that you know about.

Typically, the worker may be exposed to one of these toxic substances over a fairly long period of their career, maybe many employers. Therefore, you have at least some sense that however these systems are to be put in place that, for example, the financing should probably be on some form of a trust fund or a joint contributory process. When the worker comes down with the illness 25 years after the exposure, you do not know exactly where it happened, but you know collectively within that industry or within that part of the economic process that it happened somewhere in there, and therefore there should be a sharing of the duty to pay.

Senator RIEGLE. I just want to make one other comment. I know the chairman feels the press of time here because there is another matter that has to be taken up. But if I may, I want to say one other thing because I am afraid there has been a drift of thinking in the country in recent years that people are expendable in the same way that products are expendable.

I see developing a view that what happens to individuals that we do not know or who are in some other place does not matter very much. They are expendable, it is their tough luck or it is their problem, as long as we in our own circumstances are taken care of.

I think it is an insidious attitude, and I am afraid that it has been promoted in the last few years to an unhealthy degree. I think if we do not talk about it, we are not going to change it.

What concerns me is that there is a kind of callousness creeping in that says that when somebody out there who has been damaged in a situation through no fault of his own, we need not have any concern nor any shared role in trying to deal with it.

I reject that. I reject it with regard to the atomic tests where we are finding many people who are dying prematurely because of radiation. I reject it in terms of the fact that we know that there are literally hundreds of thousands of veterans that are suffering today from the effects of agent orange.

We have got millions of workers in the country that have been harmed by various kinds of workplace hazards, some of which we know about and some of which we do not yet have sufficient information. As a nation, we have a moral duty to respond.

That is why these hearings are important. That is why we have to persist until we find a response that reaches these problems on a timely and adequate basis.

This is not an outlandish idea. This is what the country is about. That is why we have a country to deal with these kinds of problems. It is not right that the administration witness comes before us and says that they are studying the problem but they do not have an answer and do not know when they will have an answer. That is not sufficient. That is not why we elect people.

We elect them and hire them to respond to national problems and to come in here with proposals. I hope they will sometime soon.

Mr. YOUNG. Senator, if I could just briefly——

Senator NICKLES. I am going to have to interrupt.

Senator RIEGLE. Well, I think that he ought to be allowed to make his comment.

Senator NICKLES. Please make your comment, or else you will end up chairing the rest of this hearing because I have to be on the floor. We have the bankruptcy and *Bildisco* issue before us.

Mr. YOUNG. We have heard of a few of those.

Senator NICKLES. So, please—I know that you have an interest—make your final comment, if you would.

Mr. YOUNG. I obviously agree with Senator Riegle. The only point I wanted to make was that I think our society does accept the concept that if a worker is injured on the job—if a worker breaks a leg, the worker should be compensated.

What is happening is people do not quite understand that with some diseases, there is not a direct cause and effect. There is a risk factor involved and people cannot understand—and this administration is not helping, as you said—that there is a responsibility to the people who have this high risk factor, have this exposure, and who at some point, with a high degree of predictability, may become diseased.

What is happening today, absent Federal standards, absent some legislation, is that people that get diseased have to go through litigation, and good luck to them. And what they get, if they get anything, often goes to the lawyers, and it is prolonged and the whole bit.

What we are saying is this country has to face this problem, society has to face this problem, and we should not do it on a one-step basis of asbestos. We should do it on a comprehensive system that sets up a triggering mechanism that can take care of other toxic substances as the scientific community takes a look at the population, recognizes that there is this high-risk standard, the 30-percent trigger Mr. Samuels talked about, and get some legislation passed to help these people.

Thank you, Senator.

Senator NICKLES. Thank you. I have several questions for our panelists and I wanted to withhold them in the hopes of moving the hearing a little quicker.

Just quickly, do you endorse the Miller bill?

Mr. YOUNG. We have testified on the bill and we are working with that committee on the bill now.

Senator NICKLES. Do you favor a Government contribution?

Mr. YOUNG. Our basic feeling is that the real responsibility belongs to the manufacturer and to the employer. We think there are some situations where the Government is the employer. There are probably some situations where there is a contractual relationship where the Government has the main responsibility. We think that is a problem and we want to really look at that.

Senator NICKLES. Under the type of system that you would propose, a compensation system, would it be tied to wages?

Mr. YOUNG. We have traditionally talked about two-thirds of the worker's wages. That has been our traditional position on workers' comp.

Senator NICKLES. Again, I have additional questions and I apologize for being so quick. I apologize also to our other panelists. But we do have important legislation that will be on the floor at 2:00 that both Senator Riegle and myself need to be involved in, so we will submit those questions to you in writing. Thank you very much.

Our next panelists are Martin Connor, representing the National Association of Manufacturers, and Dr. Harvey Alter, representing the Chamber of Commerce of the United States.

Mr. Connor, please proceed.

STATEMENT OF MARTIN F. CONNOR, CORPORATE COUNSEL, GENERAL ELECTRIC CO., AND CHAIRMAN, TOXIC INJURY TASK FORCE, NATIONAL ASSOCIATION OF MANUFACTURERS; AND HARVEY ALTER, MANAGER, RESOURCES POLICY DEPARTMENT, CHAMBER OF COMMERCE OF THE UNITED STATES, ACCOMPANIED BY ERIC J. OXFELD, MANAGER, HEALTH CARE AND EMPLOYEE BENEFITS.

Mr. CONNOR. Mr. Chairman, my name is Martin Connor. I am testifying on behalf of the National Association of Manufacturers as chairman of its toxic injury task force. I am Washington counsel for General Electric Co.

Over a year ago NAM set up its toxic injury task force to take a look at the bundle of issues raised by proposals for public compensation of persons harmed by exposure to toxic substances.

The task force consists of representatives of the association's environmental quality, product liability, worker compensation, and occupational safety and health committees and subcommittees.

After a year or more of study and discussion of various proposals, we have come to a number of conclusions which I would like to summarize here, very briefly. They are set out at greater length in our written statement which we have submitted to the subcommittee.

Senator NICKLES. Thank you.

Mr. CONNOR. First of all, as to the asbestos cases, the 25,000 or so pending asbestos cases and the many thousands more which are anticipated pose a very serious problem. There is no doubt about that. We do not have to elaborate on the point; it has been made often and well.

We would hope that a private solution to this problem can be worked out. We are encouraged by the news reports of the past few days to which you have referred, Mr. Chairman—the reports coming from the so-called Wellington Group—and we hope that these efforts will be successful.

If they are not successful, NAM would not oppose, in principle, the establishment of a Federal remedy for harms caused by occupational exposure to asbestos, so long as it does not preempt existing State workers' compensation remedies, but is in lieu of third-party product liability actions.

The asbestos cases which we are talking about, of course, as we have heard today over and over, are not workers' compensation cases. They are product liability cases. It is the product liability system which has failed.

For reasons we have explained in our written statement, we would be very apprehensive about any tinkering with State worker compensation systems in order to solve the specific problems arising in connection with asbestos.

So far as the questions associated with occupational disease generally go—the subject which the previous witnesses have primarily discussed—we do not see today any occupational disease problem of the magnitude and scope of the asbestos problem; we do not see any such problem on the horizon.

We do not see a crying need today for Federal solutions to occupational disease, to the handling of occupational disease claims.

The point we would like to make, and it sounds so obvious that perhaps it is silly even to say it, is this: creating a Federal remedy for occupational disease is not in and of itself a solution to any problem.

At worst, we might simply be federalizing the problem. There is no doubt that there is a problem in the processing of occupational disease claims in the State workers' compensation systems. We have to identify that problem or set of problems and we have to devise thoughtful solutions.

But merely saying, as I am afraid we hear very often, that the existence of the problem calls for Federal action begs the question. What we need are solutions, whether they are State solutions or Federal solutions. And as I have said, federalization could be just federalizing the problem.

The third point we would like to make is this: The basic problem which is faced by State administrative agencies and courts when they deal with long-latency occupational disease claims, principally respiratory disorders and cancer, is the problem of causation.

The great unknown in long-latency-period disease cases is almost invariably the identity of the agent which has caused the harm. Most of these cases, as I say, are cancer, so let us use cancer as an example.

In the typical cancer case there are two questions: Is this substance a carcinogen? Did exposure to this substance, if it is a carcinogen, cause this particular instance of cancer?

The first question is answered by use of epidemiological data, animal test data, statistical correlations, and so forth. There will often be no sure answer. The answer to the second question involves issues of exposure, dose, predisposition, preexisting conditions, exposure to other substances, and so forth. Once again, there may be no sure answer.

What we consistently face in occupational disease claims is scientific uncertainty. Although some diseases are clearly linked to certain exposures, as asbestosis and mesothelioma are to asbestos, medical science is unable, and may never be able, to determine the precise cause of many individual instances of long-latency-period disease.

Yet, worker compensation boards and courts have to make decisions, and the bottom issue, the gut issue of occupational disease, is how they are to make those decisions. How are they to resolve these questions of causation?

Now, the voguish answer today is to say we will use presumptions. We have heard that referred to several times in these hearings. Let us simply assume that if a person with a long-latency disease was occupationally exposed to a particular substance, then the exposure caused the disease.

This is the way the Miller bill would operate. It is the way in which several proposals of Mr. Florio would operate. As we explain in our written statement, however, presumptions do not, as is often claimed, facilitate proof of causation. What they really do is make causation irrelevant.

It would not matter, if you were using a presumption, whether or not this individual's cancer was actually caused by exposure to asbestos. We would just assume that it was.

As we explain in our written statement, a program of compensation for persons suffering from long-latency period disease cannot be fair and nondiscriminatory if it is based on presumptions of cause and effect.

Whether we are talking about a Federal or State program, we have to find other solutions to the problem of decisionmaking amidst scientific uncertainty. And these solutions lie, we submit, in the direction of more intelligent use of independent panels of medical and scientific experts, both for establishing and updating guidelines for decision and for deciding individual cases.

Now, a number of such proposals have been made. I am not here to endorse any particular one of them. There is one widely discussed proposal of the American Lung Association, for example. These sorts of proposals deserve our serious consideration and study. They are certainly going to be far more effective and produce a fairer compensation system than would use of gimmickry such as presumptions.

Let me say in conclusion, Mr. Chairman, that NAM strongly supports the proposition that employees who have incurred long-latency disease in the course of their employment should be promptly and fairly compensated. We are ready and willing to work with all interested parties in identifying the inadequacies of present remedies and putting programs in place aimed at their correction.

Thank you for the opportunity to testify.

[The prepared statement of Mr. Connor follows:]

TESTIMONY OF
MARTIN F. CONNOR
GENERAL ELECTRIC COMPANY

on behalf of

NATIONAL ASSOCIATION OF MANUFACTURERS

before the

COMMITTEE ON LABOR AND HUMAN RESOURCES
LABOR SUBCOMMITTEE
UNITED STATES SENATE

May 21, 1984

Good morning, Mr. Chairman and members of the subcommittee. My name is Martin F. Connor. I am Washington Corporate Counsel for General Electric Company. I am testifying on behalf of the National Association of Manufacturers as chairman of its Toxic Injury Task Force.

The National Association of Manufacturers is an association of small and large manufacturers. NAM represents approximately 13,000 member companies, 80% of which are small businesses. NAM members produce approximately 75% of the nation's industrial output. NAM is also affiliated with an additional 158,000 businesses through its Associations Council and the National Industrial Council.

Over a year ago NAM set up its Toxic Injury Task Force to take a comprehensive look at the bundle of issues raised by proposals for public compensation of persons harmed by exposure to toxic substances. The task force consists of representatives of the Association's environmental quality, product liability, worker compensation and occupational safety and health committees and subcommittees. Typical of the proposals which led to this decision have been H.R. 3175, sponsored by Congressman George Miller, and H.R. 4183, sponsored by Congressman James Florio.

H.R. 3175 would establish a federal scheme for compensating workers harmed by occupational exposure to asbestos and other toxic substances which would be designated by the Secretary of Labor. H.R. 4183, Mr. Florio's Superfund reauthorization bill, would create both a federal cause of action and a federal administrative remedy for workers (and others) harmed by exposure to a "hazardous substance." While these bills are very different in many respects, they have certain key similarities which make them representative of their kind. They are, of course, only two of many such suggestions which have been advanced in the past year or two in both the public and private sectors.

After a year or more of study and discussion of these proposals, the NAM task force has reached several preliminary conclusions which we would like briefly to summarize here.

A FEDERAL SOLUTION TO THE ASBESTOS PROBLEM?

There is a growing consensus, in which we join, that the claimants in the 25,000 or more pending asbestos cases are not being well served by the tort litigation system. The courts are overwhelmed, precious resources are being squandered in litigation, and meritorious claimants are not being compensated. Any lingering doubts on this subject were probably dispelled by the Rand Corporation's widely publicized 1983 report on the costs of this litigation.

While we would hope that a private-sector solution could be worked out among claimants, defendants and their insurers, NAM does not oppose in principle the establishment of a federal remedy for harms caused by occupational exposure to asbestos which would preempt and exclude existing remedies under state product liability laws. It may well be that the tort litigation system cannot cope successfully with the volume of pending and anticipated asbestos-related product-liability actions. NAM would, however, oppose enactment of a federal program which preempts state worker compensation laws.

The asbestos problem is a product liability problem. The cases which are clogging the courts, making lawyers rich and threatening the solvency of defendants are tort cases, not worker compensation cases. Any federal program should only provide a remedy in lieu of a tort remedy. The very nature of the worker compensation system, a no-fault system trading assured employee recovery for limitations on the extent of employer liability, makes it a delicate balance which could easily be upset if any one class of claimants, such as those alleging harm caused by exposure to asbestos, were singled out for preferential treatment. There is no apparent reason, for example, why an employee who has contracted asbestosis should be entitled to compensation under a more generous system of compensation than is available to an employee who has lost a limb. Any tinkering with worker compensation remedies will inevitably throw the whole system out of balance and create inexorable pressures for further tinkering.

If this subcommittee should ever consider a federal remedy for harm caused by occupational exposure to asbestos, NAM would urge that it be framed as a substitute for a product-liability tort claim and a supplement, therefore, to the employee's worker compensation award.

A FEDERAL SOLUTION TO THE O.D. PROBLEM?

On the other hand, NAM sees no evidence of need for more comprehensive federal occupational disease legislation, that is, for federal legislation dealing with anything else except asbestos. No other class of cases has overwhelmed, or threatens to overwhelm, state administrative and judicial systems as have the asbestos cases.

We readily concede, on the other hand, that the state worker compensation systems have, in recent years, been frequently criticized for their failure to deal effectively with occupational disease. Many observers believe that there is a large body of victims of such disease who, for various reasons, either have received no compensation at all or have been compensated at comparatively low levels. This perception has led to proposals for federal compensation systems, such as that proposed in H.R. 3175, which would supplement or supplant the remedies available under state worker compensation statutes.

The most basic conviction of the NAM toxic injury task force, and the principal point we would make here, is that federalization is not, in and of itself, a solution to any problem from which existing state worker compensation systems suffer. What is desperately needed is that we identify the deficiencies of existing state systems and devise effective and feasible solutions. Whether we implement those solutions at the federal or state level is almost a secondary question, although common sense suggests that corrective action first be attempted at the state level. Until it has been demonstrated that problems exist with state worker compensation systems which the states cannot or will not correct, there is no good reason to create mechanisms in the federal government which duplicate those already existing at the state level. What must be avoided at all cost, however, is a rush to federal or state "solutions" before we understand the reasons why the state worker compensation systems have had trouble coming to grips with occupational disease.

WHAT IS THE O.D. PROBLEM?

State worker compensation systems have served very well to compensate employees who have been injured in industrial accidents or have incurred diseases whose causes are clear and whose effects are immediately apparent. They have been less successful in compensating employees who have incurred diseases – chiefly cancer and respiratory disorders – whose causes are not clear and whose effects are not immediately apparent. These are what we call long-latency-period diseases. They are what people are usually talking about today when they discuss occupational disease.

There are a number of indicators which tell us that worker compensation systems are not handling O.D. claims well. As compared to occupational injury claims, fewer claims for compensation of occupational disease are filed, more claims are contested by employers and, at least in the case of serious harms, benefits are less. These phenomena are not, of course, the problem. They are symptoms of a problem. What is the O.D. problem?

The question which dominated discussion of occupational disease compensation in state legislatures and in the courts from the very beginings of worker compensation is how to distinguish an occupational disease from one contracted outside the workplace environment. The states undertook to answer that question by framing restrictive definitions of occupational disease and by limiting, in a variety of ways, access to the system by persons alleging occupational disease. The concern which these measures addressed is real and justified. Whether or not an industrial injury has occurred at work is usually easy to tell. Whether a disease, particularly one of those which many state statutes describe as an "ordinary disease of life," has been contracted at work or elsewhere may be very hard to tell. But even though the problem is real, that does not justify arbitrary and unreasonable bars to adequate employee compensation. Such bars still exist in some states; fortunately, their number is declining. The trend is in the right direction and it is fair to say that these kinds of obstacles to recovery are not the occupational disease problem we should be most concerned with today.

The issue which triggers public discussion of occupational disease today is not work-relatedness but causation. The "great unknown" in long-latency-period disease cases is almost invariably the identity of the agent which caused the harm. There are, to use cancer as an example, two questions: (1) Is this substance a carcinogen? (2) Did exposure to this substance, if it is a carcinogen, cause this instance of cancer? The first question is answered by use of epidemiological data, animal test data, statistical correlations and the like. There will most often be, as we have learned to our chagrin, no sure answer. Science deals in probabilities. The answer to the second question involves issues of exposure, dose, predisposition, preexisting conditions, exposure to other potential causes and so forth. Once again there may be no sure answer. We know unfortunately little about the etiology of cancer.

What we consistently face in occupational disease claims is scientific uncertainty. Although some diseases are clearly linked to certain exposures (as asbestosis and mesothelioma are to asbestos), medical science is unable, and may never be able, to determine the precise cause of many individual instances of long-latency-period occupational disease. Yet worker compensation boards and courts have to make decisions. How can they do it? This is the crux of the occupational disease problem: decision-making despite scientific uncertainty.

The device which is most often suggested to facilitate the decision-making process in occupational disease cases is a presumption of causation. Both the Miller and Florio bills, for example, use presumptions. H.R. 3175 provides that if an employee with lung cancer was exposed to asbestos in the course of employment more than ten years before the occurrence of his disability or death, the lung cancer will be presumed to have resulted from exposure to asbestos. This would be true even if his exposure had been absolutely de minimis and he had smoked five packs of cigarettes a day for fifty years. H.R. 4813 provides that if an individual has been "exposed in any manner to a hazardous substance" and if "such exposure is reasonably likely to have caused or contributed" to his harm, then the harm will be presumed to have been caused by the exposure. H.R. 4813's presumption would be rebuttable, H.R. 3175's would not be. This fact makes no practical difference, however, since we can no more prove that exposure to a given substance did not cause a particular instance of cancer than we can prove that it did.

The appeal of such presumptions plainly is that, given an employee who cannot prove that he has compensable occupational disease and an employer who cannot prove that the employee does not, most of us would intuitively opt to compensate the employee. On reflection we realize, however, that following our intuitions leads to an irrational and unacceptably discriminatory outcome. In the example given above, the probability may be overwhelming that the five-pack-a-day smoker's lung cancer was not caused by slight occupational exposure to asbestos fibers. Why, then, should he be compensated when countless others who have had extreme non-occupational exposure to asbestos fibers will also develop lung cancer and not be compensated? The point is that presumptions do not, as is often claimed, facilitate proof of causation. They make causation irrelevant. A program of compensation for persons suffering from long-latency-period disease cannot be fair and non-discriminatory if it is based on presumptions of cause and effect.

We must find other solutions to the problem of decision-making amidst scientific uncertainty. They lie, no doubt, in the direction of more intelligent use of independent panels of medical and scientific experts both for establishing and updating guidelines for decision and for deciding individual cases. They may also entail acceptance of the fact, and of the consequences of the fact, that decisions will be based on a statistical probability of causal connection.

CONCLUSION

NAM strongly supports the proposition that employees who have incurred long-latency-disease in the course of their employment should be promptly and fairly compensated. We are ready and willing to work with all interested parties in identifying the inadequacies of present remedies and putting programs in place aimed at their correction.

Senator NICKLES. Thank you very much, Mr. Connor.

Dr. Alter, please proceed.

Dr. ALTER. Thank you, Mr. Chairman. I hope you will permit our brief oral statements to be divided into two parts, myself and my colleague, Eric Oxfeld, who is our manager of health care and employee benefits for the Chamber.

I am here in my capacity as the staff coordinator for a rather large effort we have ongoing that I trust will be of interest to these hearings. That effort is similar to what Mr. Connor described for NAM, but it is perhaps of broader scope and scale, and more deliberate.

It is undertaken to understand the subject of long-latency disease exposure not only in the occupational setting, but what happens in the environment and to products. This very large effort, which involves about 40 experts drawn from our membership and about eight staff people from the Chamber, has been ongoing about 6 or 8 months. We hope to be finished in November.

We have undertaken this effort for several reasons, not least of which is our view unlike what Senator Riegle referred to, that people are not expendable. People are our greatest asset, and those are the ones that we are dealing with—people.

We also look at what the Federal Government has done to date. As was mentioned before, what have you done? Maybe too much. As I enumerate, TSCA, FIFRA, OSHA, NIOSH, Clean Air Act, Clean Water Act, RCRA, Superfund, and I am sure the list is longer of things that are very difficult to live with. And we have to say why; what is needed?

We are looking at three areas in some detail. The first is what programs are in place now? Where are the safety nets, and are they of fine enough mesh to catch people? An expert subcommittee of this Ad Hoc National Business Council on Injury Compensation, as it is called, has been examining both tort and insurance programs, public and private, to see how fine the safety net is.

Their first draft report is about 200 pages. It is in subcommittee and committee review right now, and it is only a review of the existing programs. Soon, they will start to put some dimensions on the netting.

The second group consists of a number of technical experts. It is headed by a toxicologist and includes epidemiologists, health people, and industrial hygienists, as well as others drawn from the business community. And we are dealing with that very difficult question of causation. How, in a public forum, in public policy, can we try the disease rather than all of the other factors that have been talked about?

There is so much erroneous conventional wisdom in this field that the toxicologists and epidemiologists and myself as a chemist—our hair stands on end. For example, in our written statement we question the conventional wisdom that mesothelioma is only related to asbestos, not based on anything we have done originally, but based on some Sloan Kettering and other data. They question it.

The connection is not one to one, and unless we recognize what the connection is, we cannot understand the causation.

Our third subcommittee has the most difficult assignment. They were asked to assume that a new system is needed—a very difficult assumption—and given that assumption, describe it. And I have likened it to trying to describe the fourth dimension because our experience confines our brain to three dimensions, and their experience is confined to the systems that have been described to date.

It is a most interesting intellectual exercise and I have no idea where it is going to take us, but the discussions and the paperwork put out so far by this group show what a difficult, difficult problem we are facing, and that other proposals such as the Miller bill are merely a complication upon a complication. They are not a solution to a problem that has not yet even been defined.

I would ask now if my colleague could describe this further in terms of our views specifically on workers' compensation. Mr. Oxfeld?

Senator NICKLES. Thank you.

Mr. OXFELD. Mr. Chairman, in part because of the comments on and criticisms of workers' compensation, we felt that it would be important to make a few brief remarks addressed specifically to the workers' compensation program and the degree to which it addresses occupational disease.

It is an understatement that workers' compensation is not a widely understood program, and suffice it to say that the technicalities of coverage of occupational disease in 53 different workers' compensation programs is not widely understood either.

The Chamber is a strong supporter of State workers' compensation. Our policy opposes Federal programs designed to replace, supplant, or supplement State workers' compensation, and it is a longstanding policy of the Chamber and one we hold with deep conviction.

There have been many changes and improvements in the State workers' compensation system over the past decade. Those who knew it 14 years ago would hardly recognize it today. The Chamber has been tracking changes in the workers' comp system through our publication Analysis of Workers' Compensation Laws which we have provided to this committee.

I want to highlight briefly some of the complexities of occupational disease coverage. The chart on occupational diseases, which is now seven pages long in our Analysis, is appended to our written statement.

Today, occupational disease is covered on a compulsory basis under all workers' compensation laws. All States comply with the recommendation of the National Commission on State Workmen's Compensation Laws in 1972.

We would admit, certainly, that there are restrictive provisions in a handful of State workers' compensation laws that in some instances may prevent an individual with a proven disability arising out of and in the course of employment from drawing workers' compensation.

As an aside, I would say that it is our conclusion that these restrictive provisions do not affect a very large universe of claimants, nor are they responsible for the product liability problems.

Nevertheless, we feel that in many instances they may be difficult to defend, and we point out for the record that the States have been making great efforts to remove such restrictions. Last year alone, Nevada, Virginia, and Wyoming all extended their statutes of limitations to run from a time of discovery in cases of long-latency diseases. Additional States have been making changes over the past several years.

There is a concerted effort underway right now to accelerate the pace of change in the State laws. The Crum and Forster study that has already been discussed before the subcommittee is one effort.

There is a business and industry task force sponsored by the National Association of Insurance Commissioners and the International Association of Industrial Accident Boards and Commissions. It is meeting within a day or two and working very actively in making recommendations in this area.

The Chamber and the NAM have both issued action calls to our members over the past several months urging them to work at the State level to assure that occupational disease provisions in their State laws are up to modern science.

More efforts are needed, and we strongly commend the subcommittee for these hearings, which we believe have highlighted and will help to focus the attention of the States on this problem and the need to make changes in their laws.

At the same time we urge the committee to understand that it is a very difficult political process at the state level. It is time consuming. There are many interests that need to be balanced, and because occupational diseases are a relatively small fraction of the claims within the workers' compensation system, there are problems in that system which may affect a far greater universe of claims than those people who have occupational diseases and may take precedence in State action.

I want to conclude by saying that it is the position of the Chamber that the States are responsive to workers' compensation. We support the workers' compensation system and we believe that it will be a better system for both workers and employers if it continues to be operated at the State level.

[The joint prepared statement of Mr. Alter and Mr. Oxfeld follows:]

STATEMENT
on
COMPENSATION FOR OCCUPATIONAL DISEASE
before the
SUBCOMMITTEE ON LABOR
of the
SENATE LABOR AND HUMAN RESOURCES COMMITTEE
for the
CHAMBER OF COMMERCE OF THE UNITED STATES
by
Dr. Harvey Alter and Eric J. Oxfeld
May 21, 1984

I am Harvey Alter, Manager of the Resources Policy Department of the U.S. Chamber of Commerce and staff coordinator for the Chamber's ad hoc National Business Council on Injury Compensation. I am a chemist by training.

Accompanying me is my colleague, Eric J. Oxfeld, Manager of Health Care and Employee Benefits for the Chamber and staff executive of our Council on Workers' Compensation. Mr. Oxfeld also edits the Chamber's annual publication Analysis of Workers' Compensation Laws, copies of which have been furnished to the members of the committee. We welcome the opportunity to appear on behalf of the Chamber, to express our views on compensation for occupational disease.

The Chamber has long supported provision of adequate and equitable compensation for occupationally caused disability, through a sound state workers' compensation system. We also support an equitable product liability tort system for the protection of the public.

Summary of Chamber Position

Occupational disease is a serious societal problem, although there is considerable disagreement over the dimensions. Workers have become ill, and in some cases died, as a result of exposure on the job. Our members, all of whom are employers, are concerned with the health and safety of their workforce and the need for a fair, cost-effective workers' compensation system for disability arising out of and in the course of employment.

For some of our members, who are manufacturers or producers, product liability tort litigation resulting from workplace asbestos exposure has the catastrophic potential of bankruptcy. Others, who are insurers, face payments on policies based on premiums that did not anticipate present losses. Moreover, employers, manufacturers, and insurers are concerned that workplace exposure to other substances could lead to health effects not recognized at present.

Of course, occupational disease can be costly for workers and businesses alike. A fair system of compensation is needed. At present, workers' compensation and product liability are the two principal systems that protect workers who develop occupational disease. However, their adequacy, equity, and efficiency have been sharply questioned.

Admittedly, both systems have flaws, but we have not reached the judgment that they are fundamentally unsound, and we are committed to making improvements in them. Moreover, we do not believe that any deficiencies in workers' compensation are responsible for the product liability problems, and we question the need for changing the nature of the state compensation programs in response to such problems. Furthermore, we strongly oppose federal programs designed to replace, supplant, or supplement state workers' compensation, a policy reaffirmed by the U.S. Chamber Board of Directors as recently as November 9, 1983.

In recognition of the asbestos problem, as well as other product exposure problems, the Chamber has recently taken a significant step to seek and recommend new policies and methods for dealing with exposure of workers and others to toxic or potentially toxic substances and any related disease or disability resulting therefrom. Modern times require modern approaches and that is what we hope to establish through our *ad hoc* National Business Council on Injury Compensation.

This multi- and inter-disciplinary panel of experts in medicine, toxicology, workers' compensation, employee benefits, occupational safety, insurance, environmental science, and law is chaired by the present Chairman of the U.S. Chamber Board of Directors, Mr. Van Smith, President and Chief Executive Officer of the Ontario Corporation, Muncie, Indiana. Mr. Smith is a small businessman in manufacturing, a lawyer, a former state legislator and is well experienced in several of the areas the Council is addressing.

The Present Myth of Personal Harm

The Chamber shares the concern of this subcommittee and the public for any person who may suffer illness or disability as a result of exposure to toxic substances. Certainly, there is a public perception of a growing incidence of long-latency diseases from exposure to hazardous substances, brought about, in large part, by news media attention. This perception is contradicted by epidemiological data showing that the overall incidence of occupational diseases and of all cancers (except respiratory cancer) has held steady or declined since 1933. We do know that great strides have been made in the safe handling and management of substances that would otherwise pose a threat to health and safety, and thus, tragedies are being averted. Such accomplishments must be continued and expanded.

Moreover, the public's belief that causal relationships are well established between exposure to hazardous substances and long-latency diseases is not based in fact. Science and medicine have been unable to make clear linkages between substances and/or exposure and specific diseases, for good reasons, and they are not likely to in the near future.

Fortunately, there are several comprehensive studies now underway to examine the scope of the problem. The Chamber is contributing to one being conducted by Universities Associated for Research and Education in Pathology. The results of their work will be supplemented by the investigations being conducted for the Environmental Protection Agency by the Center for Disease Control.

It has been suggested that the sizeable number of product liability tort suits arising out of workplace exposure to asbestos confirms that there is an epidemic of occupational disease. However, medical science has found that even among this population there are relatively few proven cases of impaired lung function or other illness caused by asbestos. In fact, many individuals who are diagnosed as having "asbestosis" actually have an asymptomatic condition which shows up on X-rays but is benign. It is the fear of asbestosis and asbestos-related cancer that is widespread.

Coupled with this fear are misunderstandings and erroneous "conventional wisdom." In recent testimony before this subcommittee,[1/] both Dr. Paul Wheeler, of the Department of Radiology and Radiological Science of the Johns Hopkins Medical Institutions, and Dr. Robert N. Jones, of Tulane University School of Medicine, who testified on behalf of the American Lung Association and American Thoracic Society, questioned the general accuracy of the diagnoses of asbestos-related diseases. They believe that principles of medical diagnosis have been abrogated in the asbestos field and that various draft bills have not dealt adequately with medical criteria for the conditions to be compensated. Dr. Jones stated, "public policy in this area should be based on scientific information."

Similar medical questions are raised when consulting the primary cancer literature. Papers from the Sloan Kettering Cancer Center, Cornell University, raise significant questions about asbestos-related mesothelioma. Malignant mesothelioma is a rare disease with an incidence of 2.2 cases per million population per year.[2/]

1/ P.S. Wheeler, "Asbestos-Related Litigation: A Scientific Perspective and Solution," and R.N. Jones, "Public Responsibility in Asbestos-Related Diseases," before the Subcommittee on Labor, Senate Labor and Human Resources Committee, April 24, 1984.

2/ J. Brenner, P.P. Sordillo, G.B. Magill and R.B. Golbey. Malignant Peritoneal Mesothelioma - Review of 25 Patients. Am. J. Gastroenterol., 1981, 75: 311-13.

In a review of 123 patients who had a diagnosis of malignant pleural mesothelioma, the largest series of patients from a single institution so far accumulated, the Sloan Kettering researchers found that only 16 patients related a history of exposure to asbestos. Fourteen of the patients had a history of previous lung disease; one had received prior radiation to the chest and 14 had been exposed to industrial dusts and chemicals.3/ This finding, that not all pleural mesotheliomas are related to asbestos, is consistent with a review of the literature stating that only from 10 to 70 percent of patients with malignant mesothelioma had been exposed to asbestos.4/

The general conclusion appears to be that exposure to asbestos is an important etiologic factor but other factors include serious lung disease, tuberculosis, chemical pneumonia, radiation or industrial dusts and chemicals other than asbestos.

The Sloan Kettering team, in a review of malignant peritoneal mesothelioma, found no evidence of asbestos linkage.2/ They also reported that 20 percent of malignant mesotheliomas originate in the peritoneum.

The saddest aspect of this disease is that malignant mesothelioma is found in children. In a review of seven cases, the origin was at the pleura in six and one at the periotoneum. None of the patients related a history of exposure to asbestos.5/

3/ Ibid., Malignant Mesothelioma of the Pleura, Review of 123 Patients. Cancer, 1982, 49:2431-5.

4/ K.H. Antman. Malignant Mesothelioma. N. Engl. J. Med., 1980, 303:200-2.

5/ J. Brenner, P.P. Sordillo and G. B. Magill. Malignant Mesothelioma in Children: Report of Seven Cases and Review of the Literature. Medical and Pediatric Oncology, 1981, 9:367-73.

This is not intended to be a comprehensive review of the literature, but instead to raise questions about the conventional wisdom surrounding asbestos-related diseases. In the absence of definitive information about rate diseases, we should proceed carefully in the formulation of public policy. As previous witnesses before this subcommittee stated, such public policy should be based on good science.

Methods of doing this are being addressed as part of the assignment of a special group at the Chamber. Their activities are described in a later section of this statement.

Workers' Compensation For Job-Related Disability

As the record clearly demonstrates, workers' compensation — a nearly 100 year old concept — has proved to be a reasonably efficient method of protecting employers and their employees against the financial risks of job-caused disabilities, while motivating job-place safety and promoting the rehabilitation of injured workers.

It is premised on a quid pro quo. In exchange for certainty and promptness in receiving full medical care and a reasonable level of wage replacement for job-related injuries or diseases, even when they are at fault, workers give up the right to sue their employers for unlimited damages (the "exclusive remedy" doctrine). Employers give up the opportunity to reduce or avoid liability by proving that the employee was at fault, but gain protection against unlimited liability. Both workers and employers escape the cost, uncertainty, and delay of litigation, and the public benefits from a reduced caseload in the welfare and judicial systems.

The workers' compensation system essentially consists of 56 separate programs. There is one for each state, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and American Samoa. There also are two federal programs, the Longshoremen's and Harbor Workers' Compensation Act (Longshore Act) for maritime workers nationwide and the Federal Employees' Compensation Act (FECA) for federal government workers. The Longshore and FECA programs figure prominently in the discussion of compensation for diseases related to asbestos exposure, because much of it occurred in naval ship yards in World War II. There also is a Federal Black Lung program for coalminers and their families, which is intended to compensate for pneumoconiosis caused by exposure to coal dust.

When workers' compensation was carved out of the tort system, it was intended to be neither a new form of damages nor a retirement program. Instead, its focus is on encouraging return to gainful employment. Consequently, eligibility for compensation depends on more than injury in the course of employment. The injury must also cause disability, i.e., loss of wages. To preserve the work incentive, cash benefits typically replace two-thirds of the worker's pay (in addition to full medical expenses). No compensation is payable for pain and suffering, loss of consortium, or other intangible losses, nor are there punitive damages.

In recent years, workers' compensation costs have become a major business expense for many employers. According to the Social Security Administration, the total cost to employers in 1981 (the most recent year for which statistics are available) was nearly $23 billion — an increase of more than 450% since 1970. The average cost per employee per year, according to the U.S. Chamber's Employee Benefits 1982 survey, was $258, although the average by industry is as high as $655 (for primary metal industries). The cost varies by occupations and jurisdiction (Longshore Act insurance in the New York City port area costs as much as $21,000 per year for a longshoreman earning $24,000). In addition, the cost of workers' compensation insurance is adjusted according to the experience of each employer. Experience rating gives employers incentive not only to hold down costs through preventive measures but also to contest invalid claims. This latter "watchdog" effect is essential to police the program against fraud and abuse. No government agency has the motivation or information to be as effective as the employer in this respect.

Occupational Diseases Are Covered by Workers' Compensation

Appended to this statement is the chart on occupational disease from our Analysis of Workers' Compensation Laws 1984 (Appendix I). As this chart reflects, all occupational diseases are covered on a compulsory basis under all workers' compensation laws, including FECA and the Longshore Act. Benefits for diseases are the same as for traumatic injuries, and medical care is unlimited. Contrary to statements published in the news media, statistics compiled by the National Council on Compensation Insurance and other data confirm that claimants in fact do apply for and receive benefits for disability or death caused by occupational disease. However, such claims are a tiny fraction of the universe of workers' compensation claims - around 1%, representing 2% of total benefit costs.

Workers' compensation laws have been criticized as having arbitrary "barriers" that unfairly exclude legitimate claims. It is true that all workers' compensation laws contain statutes of limitations governing timeliness of claims filing. However, recognizing that some diseases have long latency periods, today most states allow claimants to file within a reasonable time after the disability occurs and the claimant knows or should know that it is traceable to employment. A minority of states have a limitation running from the date of last employment or last exposure. Some states, but not the Longshore or FECA programs, do require that disability occur within a year or two after last exposure, and a small minority of states have minimum length-and/or-location-of-exposure requirements. Such provisions would not disqualify a claimant who has worked continuously for one employer but may disqualify an individual who has changed jobs frequently (for whom accurate information on employment or exposure may be unavailable).

Workers' compensation laws provide benefits at the same level whether disability is caused by disease or traumatic injury. However, because of the long latency and/or complex etiology of many diseases, actual awards may differ. For example, in a minority[6/] of jurisdictions, benefits are computed

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[6/] It is impossible at present to classify every state, because some have never had to address the issue, and others have conflicting precedents.

according to wages paid at the time of last exposure and thus may not be representative of actual earnings loss in cases where the disease does not manifest itself until years later. Furthermore, if there is uncertainty over causation, liability, the degree of impairment, or similar questions, the parties may settle the claim voluntarily at a mutually agreed figure that reflects these uncertainties.

State Reforms of Workers' Compensation Laws

Workers' compensation certainly has its imperfections. Although it is risky to generalize because each of the 56 programs is unique, many of them have problems that include insufficient emphasis on rehabilitation and early return to work, an alarming line of judicial decisions creating exceptions to the exclusive remedy doctrine, increasing resort to litigation in a system designed to avoid the need for legal representation, and a disproportionate share of benefits paid to individuals with relatively minor injuries. Of course, for employers the overwhelming problem is the rapidly escalating burden of payroll costs, especially acute for small business. Proposals for changes in a state's coverage of occupational diseases must be considered in the context of other problems that may affect a far greater universe of claims.

Public awareness of the need for improving workers' compensation may have been greatest following the 1972 report of the National Commission on State Workmen's Compensation Laws, but successful reform efforts have been continuous. The U.S. Chamber has long urged our membership to work for and support needed improvements in state and federal job injury laws. In addition, we have been active at the federal level in seeking reform of the present federal programs.

These efforts by all interested parties have led to major improvements in benefits and coverage, which we have tracked in the Analysis. In 1972, for example, only 9 states had a maximum weekly benefit over $80.00. Today, however, the average maximum is nearly $300.00 (see Appendix II).

The reforms have also included substantial improvement in coverage of occupational diseases. There has been remarkable progress since the Chamber first began tracking disease provisions. For example, in 1944 only 28 states were included in the occupational disease chart, and only 8 of those states had compulsory coverage of all diseases. By 1970, all states covered diseases, but 15 still covered only those diseases listed by statute in a schedule. Today, however, all states have either abolished schedules of covered diseases or amended their laws to include all occupational illnesses not listed. Only a few states now deny compensation for partial disability in case of certain diseases, and all arbitrary limits on medical care for diseases have been repealed. Provisions for lower benefits in case of disability caused by disease have been abolished in all states.

Statutes of limitations have been extended for diseases with long latency periods. The majority of states now allow claims within a reasonable time after discovery of the disability and its relationship to employment. Even states with limitations based on recency of exposure or last employment no longer apply such rules to diseases caused by radiation. A trend is under way in the remaining states to exempt other long latency diseases. For example, last year alone, Nevada repealed its requirement that a disease be contracted within 12 months prior to disablement, Virginia amended its law to allow claim for asbestos is within two years after diagnosis, and Wyoming provided that a claim for any disease may be filed within one year after diagnosis. Other states have made similar changes in the past few years.

Efforts to speed up the reform process now are under way. A report on occupational disease prepared by Crum and Forster Insurance Companies, Inc., documenting the nature of the problem and recommending specific changes in state law, has been well received and widely publicized. A business and insurance task force on occupational disease under the aegis of the National Association of Insurance Commissioners and the International Association of Industrial Accident Boards and Commissions is now preparing its own recommendations.

The U.S. Chamber is committed to the success of these efforts. In addition to the review of the injury compensation issue by the ad hoc council, our Council on Workers' Compensation, a standing policy committee, is working actively to assure that state workers' compensation laws are up to date with respect to compensating disability attributable to occupational disease. At the Council's request, our Board of Directors has issued a call to action to our members, urging them to make sure that their state laws are fair and in accord with modern science (See Appendix III). The Council and our staff are working with state business leaders to facilitate this process.

The Chamber recognizes that our contribution is only a small part of the equation and that there are many more related activities in progress, in both the public and private sectors. In particular, we commend this Subcommittee for these oversight hearings, which we believe will prove instrumental in spurring the states to action.

We must caution, however, against undue expectations of overnight success. While we acknowledge the urgency of remedial action, a realistic understanding of the legislative and political process suggests that it can be time consuming. Many competing interests must be balanced, and ways found to implement improvements in benefits without driving employers out of business.

Federal Compensation Track Record

Inextricably bound up in the policy debate over occupational disease is the historic question whether the state workers' compensation programs should be federalized, as advocated by organized labor.

As we have testified on numerous occasions before Congress, we strongly oppose federal programs designed to replace, supplant, or supplement state workers' compensation. We believe that, with all their imperfections, workers' compensation programs are best designed and implemented by state governments, which are more cognizant of local needs and circumstances.

Experience with the three federal compensation programs confirms the wisdom of the state approach. The Longshore Act, FECA, and the Black Lung program are all notoriously costly, slow in delivering benefits, and inefficient in weeding out questionable claims. None of this is news to this Subcommittee, which has oversight of all three.

The Black Lung Act is especially relevant to the occupational disease debate because it demonstrates the proclivities of the federal government in responding to this type of problem. Politics, not science, govern the rules of compensability for Black Lung benefits. The General Accounting Office has reported that, in nearly nine out of ten cases, claims are approved without medical evidence of disability caused by exposure to coal dust, and that this unenviable record results from presumptions contained in the statute itself. Consequently, the Black Lung program has grown from a temporary program estimated to cost less than $90 million _in toto_, into a permanent program costing more than $2 billion annually and contributing to the federal budget deficit.

Product Lability Law and Occupational Disease

Workers' compensation is an individual's first avenue of protection in case of occupational injury and ordinarily constitutes the exclusive remedy against the employer. However, tort liability for injuries caused by parties outside the workplace continues independent of any right to workers' compensation.

No matter how generous a workers' compensation program may be, the opportunity to recover unlimited damages, plus the possibility of punitive damages, can make the tort route attractive. A substantial percentage of the asbestos tort plaintiffs are covered by the Longshore Act and FECA, the most generous workers' compensation laws in the country. Furthermore, unlike workers' compensation, a tort recovery may be possible for a physical impairment that causes no interruption of income (as is the case with respect to much of the asbestos litigation).

In fact, for tactical and other reasons, some individuals decline to file for workers' compensation, which requires an impartial medical examination, regulates attorney fees, and must be coordinated with Social Security Disability Insurance. In addition, because any workers' compensation received usually is deductible from the tort judgment or settlement, plaintiff's counsel may be reluctant to try a case twice for one recovery. In some instances, the plaintiffs' bar is unfamiliar with workers' compensation, and a separate claimants' bar handles such cases.

Moreover, employers themselves may initiate tort claims against manufacturers. Except in two states, workers' compensation laws allow the employer to recover compensation benefits from any third party tort settlement or judgment. Indeed, the right to sue the manufacturer typically passes to the employer after a prescribed time, if not exercised by the employee. This right is referred to as the "employer's lien" or "right of subrogation."

Existing product liability tort law is in serious need of reform. Rules determining the liability of product sellers for product-related injuries vary widely and often are in direct conflict from one state to another. Moreover, because these rules are judicially created, they may change as the judicial temperament changes. The result is a wide variation of law which is changing constantly and is totally unpredictable.

This wide variation limits the ability of manufacturers to make informed decisions regarding the design of products for nationwide distribution and sale. For this reason the U.S. Chamber has taken a strong position in favor of S. 44, the proposed federal Product Liability Act, which would bring certainty to the law and ease what has become a serious burden on interstate commerce.

S. 44, however, is not designed as a remedy for the "toxic torts" problem, although several of its provisions would come into play in occupational disease tort cases. For example, the statute of limitations in product liability tort cases would run from discovery, rather than last exposure as required in some states at present.

National Business Council on Injury Compensation

Obviously, an imaginative and creative approach is needed to solve the difficult societal problems raised by the history of asbestos exposure and by acute or chronic exposure to other materials known or suspected to cause disabling or fatal diseases in animals or humans.

To address the particular problems of compensating diseases of long latency and complex or unknown etiology, we have assembled our *ad hoc* National Business Council on Injury Compensation described previously.

One subcommittee of the council is preparing a comprehensive review of the present extensive public and private compensation systems available to injured parties, plus a similar review of the strengths and weaknesses of the present tort system. Participating are nationally recognized experts in these fields. This review is being used as a basis to identify shortcomings in the country's systems for protecting its citizens from exposure to hazardous substances in the workplace, the environment, or from products. This extensive review and analysis, which is nearing completion, will be used in developing recommendations on how to remedy any shortcomings in existing compensation systems--how to assure protection.

A second expert subcommittee is examining how better to establish causation of harm from exposure to hazardous substances. This subcommittee includes experts in toxicology, epidemiology, worker health and tort. This is not as easy a task as it might first appear.

A third subcommittee has been given the challenging assignment of assuming a new system of compensation is needed in the country, and to design that system. Because all of us are influenced by our experiences, and because there are at present so many systems, we liken this assignment to assuming that a fourth dimension is necessary and asking a group to describe it. The discussions and debates within the subcommittee are fascinating. It is much too early to predict how they will turn out.

Approximately 40 experts from our membership are directly involved in this exercise, plus in many cases their staffs and other in-house resources. In addition, the Chamber has eight of its staff members assigned to the council. When the reports and recommendations are complete, we will gladly share them with members of Congress and other interested parties, to contribute additional information and viewpoints to the national debate.

CONCLUSION

Workers who are disabled by occupational disease should receive compensation and do have access to the workers' compensation and tort systems. Workers' compensation laws provide benefits for occupational diseases when claimants can prove that their disabilities result from workplace exposure. While imperfect, these programs have undergone, and continue to undergo, major improvements, including their coverage of occupational diseases. The business community is working to facilitate the process of removing restrictions in a handful of state laws that may unfairly prevent payment of compensation for a disease that has a long latency period. Furthermore, there are no "barriers to compensation" in the two federal workers' compensation programs that cover many of the asbestos tort plaintiffs.

There are indeed serious problems with compensating illness related to workplace exposure through the tort system, but these problems are not attributable to workers' compensation, and federalization of workers' compensation will not solve them. The poor record of existing federal programs substantiates our view that workers' compensation should be left to the states.

Reform of the tort system generally is needed to strike a balance among the rights of plaintiffs and defendants, individuals, businesses, and society. The Chamber strongly supports S. 44, the Federal Product Liability Act, but recognizes that it is not designed to address the particular problems of compensating individuals whose diseases arise after a long latency period and/or have complex or unknown etiology.

Finally, we express optimism that our recently formed National Business Council on Injury Compensation will be able to offer concrete and imaginative proposals for public consideration to deal with the modern problems of potential harm from exposure to toxic substances. This Council uniquely represents all of the relevant disciplines, and brings together experts from around the country. Their recommendations to the Chamber's Board of Directors will be an important step in the development of new policy for our organization. It is chaired by a national business leader with experience in some of the necessary disciplines but who is not directly associated with toxic exposures or related problems. We will keep Congress informed of its progress.

Senator NICKLES. Thank you for your comments. I have several questions and do not have time to ask them all. I will ask a quick question of Mr. Connor.

You mentioned that you did not want to federalize workers' compensation, but also said that you do not have an objection to federalizing product liability as far as asbestos disease?

Mr. CONNOR. We would hope that that would not be necessary. We would hope that the Wellington Group's discussions will be successful and that a private sector solution would be available.

While we are not endorsing any specific proposal, in principle we would not oppose a Federal remedy in the unique case of asbestos so long as it isn't a substitute for a workers' compensation remedy but is in lieu of a product liability claim.

These 25,000 asbestos cases we have been talking about are product liability cases. If there has been a failure, it has been a failure of the product liability system. We would not oppose a Federal remedy in lieu of the claimant's private third-party action.

Senator NICKLES. Are you familiar with Senate bill 44 on product liability?

Mr. CONNOR. I am very familiar with it.

Senator NICKLES. Do you think that would be a big step in the right direction?

Mr. CONNOR. Oh, I think passage of S. 44 would make an enormous difference. One of the things, Senator, which I was reflecting on as the previous panel was testifying was how easy it is to talk about the failure of State worker comp systems. But I keep remembering the famous line of G.K. Chesterton about Christianity. He said that it is not that Christianity has failed, it has never been tried.

The same thing could be said here about the State worker comp systems. They have not failed, they are not being used. The claimants are rushing to the tort system, and for some very good reasons. In the asbestos cases, all of them, virtually, are bypassing the worker compensation systems. That problem would be addressed and corrected by S. 44.

Senator NICKLES. Again, I apologize for the necessity of having to rush you through and the fact that we took a little longer with this morning's panelists than I had hoped or anticipated.

If we would have our next panel and also Mr. Beber with GAF join the panel, it might expedite the balance of the hearing. I apologize also for the lateness. This is a record for me; I am usually finished by 1:00. We went a little longer than anticipated.

STATEMENT OF JOHN S. ALBERICI, SENIOR VICE PRESIDENT, J.S. ALBERICI CO., INC., ST. LOUIS, MO, ON BEHALF OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, ACCOMPANIED BY DAVID A. JOHNSTON, DIRECTOR, HEAVY INDUSTRIAL DIVISION; W. KIRK LIDDELL, PRESIDENT, AC AND S, INC., LANCASTER, PA, ON BEHALF OF THE NATIONAL INSULATION CONTRACTORS ASSOCIATION, ACCOMPANIED BY PETER G. NASH, COUNSEL; AND ROBERT H. BEBER, EXECUTIVE VICE PRESIDENT, GENERAL COUNSEL, AND SECRETARY, GAF CORP., NEW YORK, NY

Mr. **Alberici**. Yes, Senator. My name is John S. Alberici, Senior Vice President of the J.S. Alberici Construction Company in St. Louis, MO. I am here today representing the Associated General Contractors of America. Accompanying me is David A. Johnston, Director of the Heavy Industrial Division of the AGC staff.

The Associated General Contractors of America, AGC, represents more than 30,000 firms, including 8,400 of America's leading general contracting companies, which are responsible for the employment of more than 3.5 million employees. These member contractors perform more than 80 percent of America's contract construction of commercial buildings, highway, industrial, and municipal utility facilities.

AGC appreciates the opportunity to present its views on the issues of occupational disease. AGC believes that there is no need for new Federal legislation applicable to occupational disease in the construction industry for the following reasons.

State laws presently provide for coverage of occupational diseases. Injured employees are covered under the State law of the domicile of the employer or the State in which the injury occurs, and the injured employee can pursue the claim in the State with the most advantageous State law.

AGC is concerned that enactment of legislation by Congress affecting workers' compensation would federalize a process that is best handled at the State level. Although the attempt to improve State workers' compensation laws is commendable, improvement cannot be effectively achieved by removing a part of the responsibility for workers' compensation matters from the State level, where it is most responsive to the people affected by such compensation.

Clearly, removing the responsibility the State has for its own programs through Federal legislation is a thinly veiled violation of States' rights.

AGC is also concerned with the movement toward Federal legislation in the occupational disease area in light of the sparse documentation regarding the need for such legislation. Information about the causes, scope and definitions of occupational disease to date is generally inconclusive and requires additional study.

If the problem of occupational disease is significant, we are surprised that a groundswell effort for reform has not occurred at the State level, where presumably one would expect reform to be initiated.

A recent report by the California Workers' Compensation Institute, for example, noted that only 1.6 percent of claims filed involved occupational disease, and that asbestos claims were less than 0.3 percent of all claims. It would seem that the small incidence of claims in this area hardly warrants a Federal solution.

The intrusion of the Federal Government in State workers' compensation programs is unwarranted particularly when an examination is made of the number of States and jurisdictions that cover occupational diseases.

Currently, all States and jurisdictions cover all occupational diseases, including those diseases caused by exposure to asbestos. AGC questions whether workers, employers and the public interest will be well served by the addition of a Federal function when effective State programs already exist to address the issue of occupational diseases.

The ramifications of any Federal occupational disease legislation on the national economy could be profound, particularly if it follows the course of the Black Lung Program. Such enactment would disrupt underwriting, ratemaking, availability, and procurement of insurance coverage for workmen's compensation. AGC questions the need for such a potential expense, particularly in the absence of a demonstrated need for such legislation.

For these reasons, the Associated General Contractors of America believe it would not be in the best interests of the Nation or the economy to act on Federal legislation affecting occupational disease.

[The prepared statement of Mr. Alberici follows:]

Testimony of
The Associated General Contractors of America
Presented by
John S. Alberici
to the
Subcommittee on Labor
Committee on Labor and Human Resources
United States Senate
May 21, 1984
On Oversight of Occupational Disease

AGC is:

- More than 30,000 firms including 8,400 of America's leading general contracting firms responsible for the employment of 3,500,000-plus employees;
- 111 chapters nationwide;
- More than 80% of America's contract construction of commercial buildings, highways, industrial and municipal-utility facilities;
- Approximately 50% of the contract construction by American firms in more than 100 countries abroad.

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AGC is concerned that enactment of legislation by Congress affecting workers' compensation would federalize a process that is best handled at the state level. Although the attempt to improve state workers' compensation laws is commendable, improvement cannot be effectively achieved by removing a part of the responsibility for workers' compensation matters from the state level where it is most responsive to the people affected by such compensation. Clearly, removing the responsibility the state has for its own programs through federal legislation is a thinly veiled violation of states' rights.

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For these reasons, the Associated General Contractors of America believes it would not be in the best interest of the nation, or the economy to act on federal legislation affecting occupational disease.

Senator NICKLES. Thank you very much.

Our next panelist is Kirk Liddell, representing the National Insulation Contractors Association.

Mr. LIDDELL. Thank you, Mr. Chairman. On behalf of the National Insulation Contractors Association, Pete Nash and I thank you for this opportunity to testify before your committee on this important subject.

Mr. Chairman, Mr. Nash and I come before you today to make a single point. Very simply, the point is that manufacturers and employers are not the same people. There is some overlap, certainly, but by and large in the asbestos area manufacturers and employers are not the same people.

Manufacturers are people who produce products. Employers are people who use products manufactured by others in the course of their work.

Both common and statutory law, in their wisdom, recognize this distinction between manufacturers and employers. Manufacturers are subject to product liability laws, including laws imposing strict liability. Employers and other product users are generally not subject to these laws, and if they are they usually have various rights of indemnity from the manufacturers who are ultimately responsible for the products they produce.

Similarly, the workers' compensation laws of this country do not alter this fundamental products liability relationship in occupational disease cases. Virtually all State workers' compensation laws permit employers to recover their workers' compensation payouts from any third parties who may be responsible for the injuries in question.

Mr. Chairman, our industry believes that this longstanding tort and workers' compensation legal framework makes sense from both an economic and an equitable standpoint. Accordingly, we believe that any legislative discussions regarding asbestos-related occupational disease should take place within the framework of this existing legal principle and the ideals that govern our society.

Ways to streamline the delivery systems, clarify the standards, and cut down on legal expenses are certainly worth pursuing, but ultimate responsibility for product defects should not be shifted absent truly compelling justification.

Mr. Chairman, the bottom line is that product liability is the system funded by manufacturers, whereas workers' compensation is the system funded by employers. To support a workers' compensation solution to the asbestos problem is to support a substantial shifting of costs from manufacturers to employers.

Due to the nature of products liability insurance as compared with workers' compensation insurance, it is also to support a substantial shifting of costs from insurers to essentially uninsured businesses. At the minimum, it can be said that such a drastic public policy change is without support in the congressional findings to date.

Mr. Chairman, the kind of solution to the asbestos problem that we favor is the Wellington Group type of solution—a consensual arrangement that is fully consistent with existing legal policy, yet which cuts through a lot of redtape, delay, and legal expense.

We can also support modifications in existing products liability laws for purposes of creating uniformity, increasing certainty, and cutting back on some of the broader pronouncements of a few State courts.

One thing we have great trouble with, however, is the way S. 44, which is the Kasten products liability bill, would shift costs from manufacturers to employers by altering the relationship between the products liability and workers' compensation systems.

On the barest of justifications, the Kasten bill would completely overturn the law in 48 States and the District of Columbia by eliminating all employer rights of subrogation and recovery against third parties in product liability situations.

In conclusion, NICA believes there is a tremendous difference between manufactures and employers, both factual and legal. We also believe strongly that any problems or weaknesses in our present legal system relating to asbestos-related occupational disease should be confronted directly and not dumped into the laps of another groups of payers or another compensation system.

Mr. Chairman, again on behalf of NICA, I thank you for the opportunity to testify before your committee. I have submitted a more detailed statement, and we would be happy to answer any questions.

[The joint prepared statement of Mr. Liddell and Mr. Nash follows:]

PREPARED STATEMENT OF W. KIRK LIDDELL AND PETER G. NASH, ESQ.

My name is W. Kirk Liddell and I am President of the company that owns AC and S, Inc., a nationwide insulation contracting firm based in Lancaster, Pennsylvania. Today I am testifying in my capacity as Chairman of the committee responsible for asbestos-related legislation within the National Insulation Contractors Association (NICA). With me is Peter G. Nash of the law firm Ogletree, Deakins, Nash, Smoak and Stewart, who is NICA's general counsel.

For your background information, NICA is a trade association consisting of over 400 commercial and industrial insulation contractors located throughout the United States. NICA has a vital interest in asbestos-related occupational disease, since asbestos-containing insulation products used to be routinely purchased, installed and resold by insulation contracting firms. Among NICA's member firms are companies beset with many thousands of asbestos lawsuits, companies suing their insurance carriers over policy interpretations, companies participating in the Manville bankruptcy proceedings, and companies involved in the Wellington discussions. NICA is familiar with the issues being addressed by these hearings as well as the various legislative proposals that have been suggested to date.

Mr. Nash and I come before you today to make a single point. It is a simple point. It is a central point. Yet it is a point that has been obscured in almost all of the public deliberations to date on this important subject. Very simply, it is that manufacturers and employers are not the same people. There is some overlap, certainly; but by and large in the asbestos area, manufacturers and employers are not the same people. If you buy a lawn mower and then hire someone to mow your lawn with that mower, you are an employer of someone who mows your lawn, not a manufacturer of a lawn mower. If your small business buys a truck from General Motors and hires an employee to drive it, you are an employer of a truck driver, not a manufacturer of trucks. If you are a contractor who is hired to build a building and you use Manville insulation on the job, you are no more the manufacturer of that insulation than is the Senate Labor Subcommittee. Manufacturers are people who produce products. Employers are generally people who use products manufactured by others in the course of their work. Indeed, in the asbestos context, employers may well have a closer identity of interest with the injured workers than with the manufacturers with whom we often get lumped together. Employers, like the individuals who have developed asbestos disease, have been injured from the use of asbestos-bearing products in their work.

Both common and statutory law, in their wisdom, recognize this distinction between manufacturers and employers. Manufacturers are subject to product liability laws, including laws imposing strict liability. Employers and other product users are generally not subject to these laws, and if they are they usually have various rights of indemnity from the manufacturers who are ultimately responsible for the products they produce. Lots of people might argue over whether our product liability laws are too harsh, or whether damage awards are too high, but I would be surprised to learn of anyone who felt that this distinction between manufacturers and employers did not make sense.

Similarly, the workers compensation laws of this country do not alter this fundamental products liability relationship in occupational disease cases. Virtually all state workers compensation laws permit employers to recover their workers compensation payouts from third parties responsible for the injuries in question. In cases of injuries resulting from defective products, this means reimbursement from the manufacturers and other responsible parties. These recovery actions by employers against manufacturers, called subrogation actions, are quite common and almost automatic. They reflect the fact that workers compensation is strictly a legal trade-off between employers on the one hand and employees on the other. Its purpose is not to insulate manufacturers from responsibility for their products.*

As you may know from my testimony last year before the House Labor Standards Subcommittee, our industry has strongly opposed previous legislative attempts that have sought to substantially alter the underlying tort and workers compensation legal framework while being promoted under the banner of "efficiency".* We believe that any legislative discussions regarding asbestos-related occupational disease should take place within the framework of the existing legal principals and ideals that govern our society. Ways to streamline the delivery systems, clarify the standards, and cut down on legal expenses are certainly worth pursuing, but ultimate responsibility for product defects should not be shifted absent truly compelling justification.

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*In his testimony last year before Congressman Miller's Subcommittee on Labor Standards, Thomas O'Day of the Alliance of American Insurers succinctly summarized the relationship between workers compensation and products liability as follows:

> "A point which must be kept in mind as one attempts to understand the present asbestos crisis and the relationship between our liability system and our workers' compensation system is that historically the responsibility for any work injury or disease caused by the negligence of anyone other than the employer or the employee has been the ultimate responsibility of the tort liability system. This represents a longstanding public policy which has consistently received support at both State and Federal levels.
>
> For instance, a worker injured in an automobile accident can and should look for compensation to the negligent driver if that party was someone other than a fellow employee. True, the employer will provide interim compensation benefits in the form of medical and wage loss, but these are ultimately reimbursed as the injured party settles or is awarded a judgment under the tort liability system."

Hearings on H.R. 3175 before the Subcommittee on Labor Standards of the House Committee on Education and Labor, 98th Cong. 1st Session 282 (1983).

One thing on which practically everyone who has appeared in hearings on this subject seems to agree is that the principal legal problem associated with asbestos-related occupational disease is a products liability problem and not a workers compensation problem.** At the same time, however, at least one group (the asbestos product manufacturers) has proposed a workers compensation "solution" to the problem. Product liability is a system funded by manufacturers; workers compensation is a system funded by employers. To support a workers compensation solution to

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*In my testimony last year before Congressman Miller's Subcommittee on Labor Standards, I went into more detail than today about the relationship between employers and manufacturers, and the asbestos legislation being proposed by the asbestos manufacturers. See id at 170-181.

**The following statements are representative:

> "Studies indicate that when workers' compensation claims related to asbestos are filed under workers' compensation, claimants do receive benefits. Hence, it is difficult to support the contention that our compensation system is faulty.
>
> Workers' compensation does not pick up many asbestos-related claims because these claims are filed under another compensation mechanism -- the tort system -- a mechanism which was always intended, as a matter of public policy, to be considerably more generous than workers' compensation." Id at 282 (Statement of Thomas O'Day of the Alliance of American Insurers)

(Footnote Continued On Following Page)

the asbestos problem is to support a substantial shifting of costs from manufacturers to employers. Due to the nature of products liability insurance as compared with workers compensation insurance, it is also to support a substantial shifting of costs from insurers to essentially uninsured businesses. At the minimum it can be said that such a drastic public policy change is without support in the congressional findings in the asbestos area to date.*

(Footnote Continued From Previous Page)

> "What we face here is not so much a workers commpensation failure...[as] a products liability failure, and therefore the remedy may be in amending our products liability laws, not in using that failure to advance an agenda of federalizing workers compensation." Id at 65 (Statement of Congressman John N. Erlenborn)
>
> "I am unable to accept the indictment that workers compensation has 'failed'. The answer lies elsewhere." Hearings on Asbestos-Related Occupational Disease Before the Senate Committee on Labor and Human Resources, 98th Cong. 2nd Session (1984) (Statement of California Workers Compensation Institute)
>
> "When it comes to compensating asbestos disease victims, the tort system has quite simply broken down.
>
> "Overall, existing [workers] compensation systems work rather well." Id (Statement of Committee for Equitable Compensation)

*A broad range of employers would be affected by such a change, including many small businesses who are not presently defendants in any asbestos tort claims. Although these employers may presently not have the slightest idea that they could be affected by asbestos legislation, they would be certain to be heard from once they discovered that they were being forced to shoulder the asbestos-product manufacturers' burden through the workers compensation system.

I urge you and your colleagues to give serious consideration to this manufacturer/employer distinction as you consider S.44, the Kasten products liability bill. The Kasten bill would completely overturn present law by requiring claimants to exhaust all available workers compensation benefits before bringing products liability suits. It would also overturn the law in 48 states and the District of Columbia by eliminating all employer rights of subrogation and recovery against third parties in products liability situations. In sum, S.44 would shift from manufacturers to employers the primary litigation expense and the primary liability to plaintiffs in products liability situations. As a representative of those employers I ask why we should be held ultimately responsible for a defective lawn mower, or a truck or asbestos-bearing insulation materials without any right of recourse against even a party who knowingly or negligently created the defective product? It does not make sense to me, and I cannot imagine that it would make sense to too many others upon reflection.

In summary, NICA summits that there is a tremendous difference between manufacturers and employers, both factual and legal. Certainly they should not all be included in the same category. We also believe strongly that any problems or weaknesses in our present legal system relating to asbestos-related occupational disease should be confronted directly and not dumped into the laps of another group of payors or another compensation system. If we have a products liability problem, then let's treat it as such and not as something else. If the products liability laws of this country need to be reformed, then let's reform them. If the state workers compensation laws are too restrictive, then let's change them. If we need to create some special rules applicable to asbestos claims, or create some sort of special facility to handle asbestos claims, then let's do that. But let's not turn the system on its head by penalizing employers for someone else's defective design or failure to warn. Above all else, let's not create a system that is at odds with both economic logic and our basic notions of justice and fair play.

Mr. Chairman, I thank you for this opportunity to testify before your committee on this important subject. If my oral comments or our more specific prepared statement have raised any questions in your minds, I would be glad to try to answer them.

Senator NICKLES. Thank you very much.

Mr. Beber?

Mr. BEBER. Thank you, Mr. Chairman. I am an executive vice president and member of the board of directors of GAF Corp. I appreciate the opportunity you have extended to GAF to appear this morning.

I have formal testimony which has been submitted for the record and I ask that it be made part of the proceedings.

Senator NICKLES. Certainly.

Mr. BEBER. In the interests of brevity, let me restrict my remarks to three areas: First, the Wellington proposal; second, bankruptcy generally; and, third, the role of the U. S. Government.

On Friday of last week, I received a copy of the Wellington documents. I cannot tell you that I have studied them thoroughly, but I have read them and the documents, I believe, pose major problems for GAF Corp.

The reason, in my opinion, that we have a problem in the tort system with asbestos product liability is because the insurance industry candidly has reneged on the contracts of insurance that they have written with the producers. Had the insurance carriers lived up to their contractual commitments, I would submit to this committee we would not be in the position we are in today.

If you read the Wellington documents, the insurance carriers are trying to perpetuate the condition which they have created causing the litigation that now exists between the insureds and the insurers.

If GAF subscribed to the Wellington agreement, we would have to forego a major aspect of the suit we have against our carriers in the State court in California. Other aspects of that suit would be submited to third-party type adjudication system.

We would forego our claims for bad faith. We would forego our claims for punitive damages. We would lose important contractual coverage regarding defense obligation. We would also give up settlement previously reached with some of our insurance carriers. We would even forego our opportunity to recover our attorneys' fees if we are successful. And then, having done all of that, there is no assurance that we will get the coverage we think we will get if we stayed in the California State judicial system.

I just think it is unconscionable for the insurance companies to think we can subscribe to that type of an agreement.

We have a track record in disposing of asbestos-related state health claims. We know that GAF had a relatively small market share. Once having locked ourselves into Wellington GAF would lose control over the existing 16,000 cases now pending and our relatively small percentage participation in settlement may mushroom considerably.

Finally, we think the Wellington system will bring forth cases we would otherwise not see and the cases that are of significance will remain in the judicial system. The plaintiffs' lawyers will not submit high value cases to the Wellington facility for adjudication.

As I read the Wellington agreement, that facility will retain a single attorney to represent all producers in the tort system. Based upon my understanding of conflicts of interest a single attorney cannot represent all the competing coproducers against the plaintiffs unless each producer waives its cross-claims against the others. I just do not understand how that can happen without every insurance carrier becoming a member of the Wellington consortium and know this will not happen.

With respect to the subject of bankruptcy, in connection with the amendments of the bankruptcy laws necessitated by the *Marathon Pipeline* decision—and I understand, Mr. Chairman, you are having hearings or considering amendments in connection with the *Bildisco* case—let me suggest that the bankruptcy laws require major restructuring if a healthy, profitable corporation like Johns Manville Corp. can hide under that law and escape its full liability to plaintiffs and others in the asbestos cases. Piecemeal remedial legislation is not the answers.

If you look at Johns Manville's record since being in bankruptcy, I submit to you that there have been more moneys paid out in legal fees in the bankruptcy proceeding than would have been paid to the plaintiffs in individual cases.

Manville went into bankruptcy on the theory that future cases, when added to its present caseload, would create liabilities in excess of its assets. And now, as I understand what they are attempting to do in the bankruptcy court plan, is to ignore those future cases. We now have two Federal court decisions which say that future claims are not cognizable in the bankruptcy system. This being so should Manville not be dismissed out of the bankruptcy court.

Finally, with respect to the role of the U.S. Government, we are not looking for a Federal bailout. We are not looking for legislation whereby the Federal Government will come in and take over, in some fashion, the payment of claims to the underlying claimants in the asbestos cases.

We think that would be a mistake. I testified against the Miller bill in hearings before a subcommittee of the House. We think that the Government has a financial responsibility with respect to asbestos-related health claims. The Government sold asbestos. It did not, as the representative of the Department of Justice said, buy asbestos from industry and sell it back into the market.

We have evidence to show that the Government was an importer of asbestos and sold it to industry. We have a contract between the Government and a predecessor company of GAF, Ruberoid, pursuant to which the Government funded the exploration of asbestos; in effect, the Government paid for asbestos to be found and put into commerce.

On this basis alone, the Federal Government has an obligation, as any other tort feasor, to pay for the injury it caused.

I would like to conclude by saying that in our suit against the government, we have conducted extensive discovery and we have found what we believe to be evidence of significant amounts of insurance available to the Government, insurance where the Government was named as a third-party beneficiary.

We submit that the Government should rely upon that insurance, call upon it, as a third-party beneficiary, and make it available to the injured parties.

Thank you, sir.

[The prepared statement of Mr. Beber follows:]

TESTIMONY OF ROBERT H. BEBER

Executive Vice President, General Counsel
and Secretary
GAF Corporation

On behalf of GAF Corporation, this is to thank the Subcommittee for the opportunity to address what GAF feels are the major issues involved in asbestos-related health litigation. GAF also applauds the Subcommittee for undertaking its general factual inquiry before concluding that federal legislation is either necessary or desirable, as well as in advance of framing any specific legislative proposal.

As outlined briefly in this testimony, GAF is not convinced at this time that federal legislation along the lines previously proposed is necessary or desirable. Certainly, GAF does not believe that any of the legislative proposals that have been advanced previously would be adequate, fair or equitable. With this introduction, GAF will in this testimony touch briefly upon the asbestos litigation as it has affected GAF, and will identify what it sees as the major issues (and the solutions to these issues) involved in the asbestos-related health area.

A. GAF Corporation's Involvement In Asbestos-Related Health Litigation

Prior to 1967, GAF never made asbestos products. In 1967, GAF, a diversified chemical manufacturer, merged with The Ruberoid Co., a well-respected manufacturer of building products. Ruberoid was best-known for its roofing products, especially its rolled and built-up roofs. A portion of Ruberoid's business also included the manufacture of certain asbestos-containing thermal insulation and other products.

In 1969, GAF was named as a defendant in its first asbestos case. It received two cases in 1970; three in 1971; four in 1972; six in 1973; and seventeen in 1974. After 1978, the asbestos litigation expanded greatly, and asbestos health claims became a matter of serious national concern. At present, GAF is a defendant in approximately 16,000 cases. It has also settled or otherwise handled over 7,000 cases. The number of cases has continued to increase, although it appears that the rate of increase has slowed.

Significantly, GAF no longer makes any asbestos product. However, although GAF no longer makes asbestos products, it continues to be named as a defendant in asbestos cases, and is likely to be named as a defendant in such cases in the foreseeable future. Moreover, asbestos-related disease is caused, generally speaking, by exposures over a period of years, and the disease is progressive, with symptoms often not appearing until years after the exposure. Thus, for GAF and companies like GAF, the asbestos health problem cannot be approached merely by prospective adjustments in its operations, but only by a remedy which is fair and equitable in light of the company's past operations and the future course of the asbestos health problems.

B. GAF's Experience in Defending Its Asbestos Cases

As an initial proposition, it is necessary to distinguish sharply between the worker's compensation system and third-party tort litigation. The systems can and must operate separately, for a variety of reasons.

First, the worker's compensation laws create a system where the employer is obligated to compensate its employees for work-related injuries, regardless of fault. Because no question as to liability or fault is raised, a limit is placed on the amount of compensation that the worker will receive. Similarly, worker's compensation insurance is procured separately, under different assumptions than general liability insurance, simply because compensation will be paid, regardless of fault. And, of course, worker's compensation benefits are payable only to a company's own workers, so that the universe of potential claimants and their potential claims are easily ascertained.

With respect to its own workers, GAF is meeting and has always met its obligations, and provides compensation to its employees in a manner and to the extent provided by applicable state law. GAF believes there has been no delay in its provision of compensation to its workers, and that such compensation has been afforded without lengthy litigation, excessive attorneys fees or other costs. GAF hastens to add, as well, that it has not been presented with large numbers of asbestos-related worker's compensation claims.

The litigation facing GAF, therefore, does not derive from worker's compensation claims. Rather, GAF is a defendant in thousands of cases where plaintiffs have simply alleged exposure to asbestos-containing products. In many of these cases, products manufactured by GAF or its predecessors were in fact never present at the job site or other location at which the plaintiffs worked. In these cases, GAF has been blindly named as a defendant, despite the fact that there is absolutely no factual basis for GAF's involvement.

In a large number of other cases, even where exposure to products formerly manufactured by GAF or one of its predecessors has been specifically alleged, the presence of GAF's products was extremely minimal. Finally, in the remaining cases, the evidence demonstrates that GAF's products were used improperly, or that inadequate precautions were taken by the plaintiffs' employers, at the job site where GAF's products were used, to protect the health and safety of workers. (GAF, of course, had no knowledge of, or control over, the job sites where someone else's employees worked.) In most of these cases, the parties responsible for these asbestos-related health injuries -- the supervisors of these job sites -- were the United States Government and its contract shipyards.

GAF believes, therefore, that any effort to address asbestos-related health issues must take into consideration the fact that many claims against manufacturers are misplaced or are unsupportable; must allocate responsibility only where there is a demonstrable nexus between a manufacturer's products and proven injuries; and must fairly allocate responsibility among parties that caused asbestos-related health injuries, including the United States Government and private contract shipyards, as discussed further below.

C. Adequacy of the Judicial System in Handling Asbestos-Related Health Claims

GAF believes that the judicial system has dealt well and responds adequately to most asbestos-related health claims. GAF does not believe that the tort system has "broken down," or that asbestos-related health claims should be placed in a separate category. This is a fiction raised by the insurance industry.

In the first place, when compared with other types of litigation, such as automobile cases, the number of asbestos-related health claims is not excessive. Approximately 5,000 asbestos cases are filed each year on a nationwide basis, with most of these cases concentrated in the states of California, Pennsylvania, Mississippi, and New Jersey. Certainly, in comparison to automobile cases, the number of asbestos-related cases is not that large, even in these jurisdictions.

Furthermore, GAF settles most of its asbestos-related cases promptly after processing of the cases, upon a showing that products formerly manufactured by GAF or its predecessors were present at job sites at which the claimant worked, upon obtaining an assessment of the injury to the claimant and a showing that the injury is asbestos-related, and upon receiving a reasonable settlement offer from the claimant. GAF's experience, therefore, is that the present tort system for the most part functions adequately. Perceived deficiencies, if any, are not related to asbestos. Compensation is awarded to injured parties as promptly as possible, and awards are made based on actual degree of injury and not on some artificial formula. Furthermore, in GAF's experience, the litigation costs associated with these awards are not excessive. Figures that have often been bandied about concerning the percentage of compensation which is actually received by the claimant are, in GAF's experience, inaccurate. The percentage of costs allocable to the litigation, as opposed to actual payments to workers, is much lower than the figures used in the vast majority of cases, at least for responsible parties such as GAF.

GAF therefore believes that the judicial tort system is functioning well and efficiently in delivering compensation to injured workers. The present tort system, moreover, achieves all of the goals that a fair compensation system should achieve. First, the judicial system allocates compensation on the basis of the degree and amount of individual injury, and not on some blanket formula imposed by statute or rule. (Certainly, GAF does not believe that victims of asbestos-related diseases should be isolated or that plaintiffs in asbestos cases should -- unlike plaintiffs in other similar litigation -- be restricted unnecessarily in their ability to pursue remedies they now have under state law.)

Second, it is inevitable that there will be costs involved in the processing and evaluation of claims, regardless of the compensation system. In order for any compensation system to function, there must be some evaluation of claims, deletion of frivolous or fraudulent claims, and maximization of recoveries to parties actually suffering injuries. GAF suggests that any claims processing and evaluation mechanism will require significant expenditures, which would not be significantly less than the amounts currently expended for essentially the same purpose in the tort system. Importantly, with the experience private industry and certain members of the plaintiff and defense bars have developed over the past decade or so in handling asbestos-related health claims, GAF believes that private industry can in the future most efficiently and economically process and evaluate asbestos-related health claims. This efficiency and effectiveness should only increase as experience with asbestos litigation grows and important issues are resolved.

In this regard, GAF believes that the judicial system of our country has grappled well with novel issues involved in the asbestos litigation. Whether it be asbestos or some other substance, the resolution of these issues was inevitable, and important for our judicial system.

D. Insurance Coverage Controversies

It is fair to say that the largest stumbling block in the asbestos litigation has been the resolution of insurance coverage disputes. GAF does not believe there ever should have been any question raised by insurance carriers concerning their contractual duties fully to defend and indemnify GAF. Based on its knowledge and experience, GAF also believes that all asbestos manufacturers were, and are, to a greater or lesser extent insured by private insurance, which provides for substantial defense and indemnification. To a large extent, GAF believes that many of these policies have not yet been located by a number of affected companies.

With respect to itself, GAF and its predecessors were, and are, responsible companies that obtained substantial amounts of general comprehensive liability insurance and workers' compensation insurance. GAF and its predecessors paid for this insurance in order to cover the very type of unanticipated liabilities raised by the asbestos health claims.

Through diligent work and good record-keeping, GAF has finally documented policies for several decades which provide for comprehensive general liability and workers' compensation coverage. Assembling records to document this coverage has been a time-consuming and expensive effort which is continuing. However, GAF believes that the insurance coverage it purchased over the years, and which it has located, will permit it to provide asbestos health victims with compensation where appropriate -- if GAF is successful in its litigation with its primary and excess insurance carriers. GAF further believes that a significant amount of such insurance coverage exists for other affected employers, manufacturers and distributors.

However, despite having located a vast number of policies, having called upon its carriers to honor their contractual obligations, and having formerly paid for these insurance policies, GAF -- like other former asbestos manufacturers -- is embroiled in litigation over what these policies mean; whether or not the policies will be construed by the courts to afford adequate coverage for asbestos health claims; and the extent, if any, to which GAF is entitled to other damages for breach of the carriers' fiduciary duties to GAF.

GAF is in a better position than most, if not all, manufacturers. It has located its policies; it has pursued its contractual rights vigorously; and some of its carriers have been supportive. Yet, for every dollar it has recovered under its insurance policies, GAF has expended significant effort and substantial monetary resources, to date millions of dollars, just to enforce policies it previously paid for. Nor is the battle over. GAF remains entangled in its coverage litigation, which will require it to expend additional funds in attempts to have its policies honored.

GAF is not alone. Essentially every asbestos manufacturer is involved in the same or similar litigation, even though such litigation should not have been, and should not now be, necessary. The decisions in several coverage cases, including particularly Keene v. INA, 667 F.2d 1034 (D.C. Cir. 1981), cert. denied, 455 U.S. 1007 (1982), decided here in Washington, have decided the insurance coverage issue in the asbestos litigation. Moreover, the result in Keene was the same as what the 20 largest insurance carriers, under the auspices of the American

Insurance Association itself had decided was the proper coverage rule, as early as April 21, 1977.

E. The Wellington Proposal

In the past year, much has been made of attempts to resolve some coverage disputes through an organization known as the "Wellington Group." However, the Wellington Group has not represented, and at this point does not represent, either all manufacturers and other participants, or all insurance carriers. GAF does know whether or not the Wellington Group proposal deals with all of the insurance coverage which was written for this type of liability.

In addition, some manufacturers, such as GAF, have to this point been excluded from the Wellington Group. Indeed, as of the time of preparation of this testimony, GAF has not been presented with the Wellington Group proposal. Therefore, it certainly cannot be said at this point that a "global solution" has been reached.

Based on proposals previously advanced, GAF has serious specific concerns with suggested so-called "global solutions" to insurance coverage disputes. First, GAF has been severely injured by the refusal of certain of its insurance carriers to defend and indemnify GAF in the asbestos litigation. GAF's injuries have included significant expenditure of time and attorneys fees, restrictions in GAF's day-to-day operations, and other losses. GAF's claims against certain of its insurance carriers for these and other damages are significant, and GAF must be compensated appropriately for these damages. Second, GAF is and has always been a manufacturer of a broad range of products. Indeed, its asbestos manufacturing was only a very small portion of its business. It is important to GAF to assure that it has retained adequate insurance coverage for all of its businesses, not just asbestos. Accordingly, GAF does not believe it proper or appropriate to "surrender" all of its insurance coverage as part of any supposed "global solution" of the asbestos coverage disputes. GAF believes strongly in this position, especially since it believes it procured more than adequate insurance to address all of its potential liabilities, including asbestos.

At this point, not having seen the Wellington Group proposal, GAF cannot fairly evaluate the proposal's ability to address these concerns. GAF does know, however, that there has been a substantial dispute concerning these concerns in the past. GAF is also aware that certain members of the insurance industry have been reluctant to embrace the Wellington Group proposal. Finally, GAF believes the Wellington Group proposal may not address certain unresolved legal issues, as well as the significant amounts of additional insurance coverage that remain to be located and analyzed.

F. The Legal Obligations of the United States

GAF believes that all responsible entities should bear their fair shares in connection with asbestos health claims.

Thus, the United States, because of its pervasive role in causing asbestos health injuries, should be forced to contribute to payments made to asbestos health claimants.

The following facts demonstrate the outline of the Government's involvement in, and causation of, the national asbestos tragedy:

1. A huge number of asbestos health claimants were exposed to harmful quantities of asbestos while employed by, and at the facilities of, the United States Government and its contracting agents. There is abundant evidence that the United States and these contracting agents maintained unhealthful workplace environments at these facilities, despite their explicit knowledge of the hazards of asbestos (which knowledge was not communicated to GAF.)

2. In the late 1940s, the United States Government sold GAF, and perhaps others, thousands of tons of amosite asbestos for inclusion in products which the Government intended for use in its and other shipyards. This asbestos was sold to GAF without warning or caution. This Government asbestos was sufficient to supply a GAF insulation plant with its amosite asbestos needs for several years.

3. The United States Government provided funds and support, pursuant to a written agreement, to GAF in the early 1950s as part of the Government's efforts to increase domestic supplies of asbestos.

4. The United States Navy required that products used in outfitting its ships contain specified quantities of asbestos, and refused to approve non-asbestos substitutes even after the Navy knew asbestos was a public health concern for its and other workers.

5. The United States Government permitted unhealthful conditions in its shipyards and in its contract shipyards even though it was aware as early as the 1930s that asbestos could cause asbestosis and other health problems.

Based on the work it has done, GAF believes that the United States is, or should be held, legally responsible for asbestos-related health claims. GAF has presented its claims to the United States, which has so far failed to compensate GAF for any such claim. GAF has also been forced to sue the United States, and to incur significant legal costs, in order to seek payment from the United States. Accordingly, GAF believes that the responsibilities of the United States and its contracting entities must be recognized.

G. The Manville Bankruptcy

The Manville Bankruptcy has had a tremendous impact on the asbestos litigation. Although Manville was, and is, a profitable company that could fully meet its current asbestos-related obligations, Manville has used the bankruptcy procedure to attempt to avoid its responsibilities. Despite filing its bankruptcy petition on the basis of future claims, Manville is now attempting to avoid all of these future claims. Since two courts have now held that future claims are not cognizable in bankruptcy proceedings, it is clear that there is no reason why Manville cannot, and should not be forced to, meet its asbestos-related responsibilities.

If any legislation is proposed as the result of these hearings, this legislation must address the situation Manville has created and seek to prevent future such abuses of the bankruptcy system.

CONCLUSION

The national asbestos tragedy has not lent, and does not lend, itself to any easy solution. There are undoubtedly solutions to this national problem. However, the "easy solution" of simply looking to the manufacturer, when the manufacturer: (1) no longer makes asbestos products; (2) has already paid millions of dollars in insurance and related costs over the past several decades for liability coverage for these very injuries; and (3) was not principally responsible for asbestos health claims in the first place, is unfair and unworkable. If the Government were to bear its fair share of responsibility, it is probable that, on a national basis, there is sufficient insurance coverage, through existing workers' compensation and comprehensive general liability policies -- which have been in force since, in some cases, the 1920's -- to provide appropriate compensation for asbestos disease victims in the United States. The problem is not that there is no coverage for these claims. The problem rests largely with the the United States and the world-wide insurance industry, which has failed to honor its policies; which cannot agree upon a consistent interpretation of identical policy language; and which has tied up asbestos compensation in some of the most complicated and expensive litigation this country has ever seen.

Ultimately, with respect to asbestos, if any legislation is proposed, the efforts of this Subcommittee should be focused on untangling the insurance, Government and contract shipyard liability, and bankruptcy issues to provide a fair and equitable remedy. And, in proposing any remedy, GAF submits that principal reliance should be placed on the private mechanisms and groups that have substantial experience in asbestos claims management and compensation.

Senator NICKLES. Thank you very much, Mr. Beber. To all of our panelists, I appreciate your brevity; that was very kind.

I have a couple of general questions. None of you support a Federal solution—that is, the Miller bill or something similar to that. Is that correct?

Mr. LIDDELL. I believe that is correct.

Mr. ALBERICI. Senator, would you repeat that?

Senator NICKLES. I was asking a panel question. None of you support a Federal solution to this problem—that is, something along the lines of the Miller bill.

Mr. ALBERICI. That is correct.

Senator NICKLES. I appreciate the comments, Mr. Beber, that you made concerning the Wellington Group. As I stated earlier, I have not had a chance, nor has our staff really had a chance to review it, although I am encouraged by it, and also have wanted to encourage a private solution and not a Federal solution, if possible, in a very difficult area. We have not gotten into the details yet, but will do so shortly.

Mr. Liddell, one comment you mentioned in your statement was a reservation on Senate bill 44. Would you mind repeating that?

Mr. LIDDELL. Yes; it is really only one feature of S. 44 that we have a reservation about, and that is the elimination of the employer's subrogation rights, which I understand is still in the bill as of the time it came out of the Commerce Committee.

We feel that the purposes of the bill will be well served without that provision. We do not see a justification for the provision and we do think it represents, really, a very fundamental shift in the relationship between workers' comp and products liability. So, yes, that one section of the bill we do have a problem with.

Senator NICKLES. And in speaking for AGC, you mentioned your research has found that all the States do have coverage for occupational disease?

Mr. ALBERICI. Correct.

Senator NICKLES. Are there not some States that have a time limitation which, if manifestation of the disease was latent, that is, 20-some years after exposure, that it would not cover to date?

Mr. ALBERICI. I am not an expert on the wording of every State's laws. We work in Missouri and some other States. I would say this, Senator: If there is anything to be corrected, it should be done at the State level, and the wording of such may be corrected within the State laws rather than adding another burden of Federal laws that might duplicate that.

Senator NICKLES. Gentlemen, again, I apologize for being in a rat race and taking so long this morning with some of our other panelists and rushing you through in this hurried manner.

Mr. LIDDELL. Senator Nickles, Mr. Nash had an oral statement. I was wondering if he could submit that for the record.

Senator NICKLES. Certainly, we will be happy to include that in the record.

[The statement of Mr. Nash and additional material supplied for the record follow:]

Comments On
Asbestos-Related Occupational Disabilities
by
Peter G. Nash, Esq.
May 21, 1984

Some who have testified earlier on this subject before your Committee have suggested that asbestos-related litigation threatens the very existence of a significant industry in our country. In addition, earlier testimony has fairly established that the majority of the funds expended on claims involving asbestos-related disabilities is spent in lawyers' fees and litigation expenses, and that less than 40 percent finds its way to deserving claimants. Many seem to think that a new system is worth considering.

The business representatives who have appeared before this Subcommittee have, until today, primarily represented asbestos manufacturers and their insurers. Oversimplified, at least one witness has proposed the following solution. Others have endorsed aspects of that proposal.

Most asbestos claims in this country are presented by employees who, in the course of their employment, have installed or used asbestos and who have been injured as a result. Thus, it is suggested that the most sensible way to handle this problem is to require those employees first to seek workers compensation from their employer to compensate them for their disability. Second, because asbestos manufacturers have some admitted responsibility for having created the product and for not having adequately warned of its dangers, a special fund should be established and funded by the manufacturers and their insurers to provide additional compensation to claimants. It is proposed, in order to reduce expensive litigation, that claims made against that fund be based upon the litigation record in the initial workers compensation case, and that the claimant's employer not be allowed to seek reimbursement of paid workers compensation claims from the fund or contributing manufacturers. It is suggested that such a system would reduce litigation expenses and delays, would limit the liability of overburdened manufacturers and insurers, and would provide prompt and meaningful monetary relief to asbestos claimants.

The National Insulation Contractors Association submits, however, that there is a fatal flaw in this otherwise reasonable proposal. Thus, the proposal (and similar "workers-compensation-*first*" proposals) shifts the primary responsibility for asbestos-related litigation, and the primary responsibility for claims payments, from asbestos manufacturers to their customers -- including those employers represented by the National Insulation Contractors Association who purchased asbestos from the manufacturers and whose employees installed it.

Experience to date with asbestos-related litigation indicates that very few employees file claims under the workers compensation system.1/ As a consequence, most asbestos-related litigation has been in the form of product liability, tort litigation against

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1/ See particularly the April 30, 1984 remarks before this Committee of Edward C. Woodward, Assistant General Manager, California Worker's Compensation Insitute.

the manufacturers of asbestos. It is those manufacturers (and their insurers) who have employed the defense counsel and who, when cases have been lost, have paid the liability claims. In those relatively few instances in which workers compensation claims have been filed initially, the employers who have been responsible for those claims have had the right to seek reimbursement from asbestos manufacturers by exercising their rights of subrogation in product liability cases which followed. Thus, at least to date, our judicial system and juries have made the judgment that the manufacturers of asbestos have been primarily responsible for asbestos-related disabilities and are to be primarily responsible for defending and ultimately paying asbestos-related claims.

However, under the proposals summarized above, those manufacturers and their insurers would shift that burden and responsibility to the employers who purchased and installed asbestos. Thus, every claimant would be required to present a workers compensation claim to be defended by his or her employer. At the conclusion of that defense -- a defense paid for and conducted by the employer -- the claimant could then proceed to receive additional compensation from a fund established by the manufacturers and their insurers. Further, the employer, who paid for the defense of the claim in the workers compensation case and who paid the initial claim, would lose its right to seek reimbursement from those manufacturers and their insurers.

The National Insulation Contractors Association, although not committed to a need for change, has no quarrel with the conclusion of the asbestos manufacturers and their insurers that a new system should be considered in order that they may stay in business and that claimants may obtain expeditious and effective relief. Nor has our organization any particular quarrel with the concept of a special fund to deal with the product liability claims of persons suffering from asbestos-related disabilities. But we do respectfully suggest that any new system and any fund deal with product liability issues and that it not burden the workers compensation system, and the employers who support it, with massive new responsibilities and liabilities. Such a shifting of responsibility and liability is not, in our judgment, justified by the record. Nor is it, we submit, fair and equitable.

STATEMENT OF JOE G. HOLLINGSWORTH
ON
GOVERNMENT KNOWLEDGE OF ASBESTOS HAZARDS
BEFORE
LABOR SUBCOMMITTEE ON OCCUPATIONAL DISEASE
SENATE LABOR AND HUMAN RESOURCES COMMITTEE
MAY 21, 1984

Mr. Chairman and members of the Labor Subcommittee on Occupational Disease:

My name is Joe G. Hollingsworth. I am a partner in the Washington, D.C. law firm of Spriggs, Bode & Hollingsworth. Our firm represents two companies who manufacturered and supplied asbestos-containing products to the United States military under mandatory specifications set forth in contracts with the federal government. I want to thank you for the opportunity to address the Subcommittee about the legislation you are now considering.

We have followed closely and with great interest the hearings held by this Subcommittee over the past several months. We have analyzed carefully the statements made by such diverse groups as the American Lung Association, the Rand Corporation, and the Asbestos Victims of America, each of which provides one piece to what can properly be characterized the "asbestos puzzle," the interlocking relationships between those who suffer from asbestos-related diseases and disabilities and those who are now being called to account for it. But as you review the testimony and other documentary information as we have, I believe you will notice -- as we do -- that a piece of the puzzle is missing. It is that missing piece which I want to discuss with the Subcommittee today: The United States government, which had knowledge of the hazards of exposure to asbestos products since the early part of this century, has failed to make effective use of this knowledge to enforce workers' safety and health programs, the tragic consequences of which you have heard and seen. The Government, therefore, must be a contributing participant in any compensation scheme.

The Government's role to date in devising an equitable and practical compensation scheme in the asbestos controversy, however, has been anything but active. Its role has in fact been defensive. The United States has refused to accept any responsibility for its failure to provide a safe work environment or even to warn its workers about a potential threat to their health. Indeed, it has chosen instead merely to observe from a safe harbor as a tide of tens of thousands of lawsuits overwhelms the state and federal court systems; as private manufacturers -- which responded to the Government's insistence and need during the Second World War for asbestos-containing products -- are pushed to the brink of financial disaster defending themselves against these suits and paying out settlements; and as an untold number of worker-victims are forced to compete for even a small portion of the limited funds being made available through traditional workers' compensation schemes.

You may ask what possible "incentive" the United States can have to obligate itself to a compensation system for asbestos victims when no court has yet found it to be in any way responsible. The answer lies in a determination that the depth and breadth of the government's knowledge of the hazards of asbestos and its failure to use that knowledge beneficially makes it responsible to those who now seek relief.

For almost two years, we have been involved in complex litigation with the federal government and former shipyard workers from government-contract shipyards. Through court-sanctioned discovery and literally thousands of hours in the National Archives and at Navy document depositories, we have compiled a startling collection of documents cataloging the Government's knowledge of the hazards of prolonged exposure to asbestos products. I want to highlight a representative portion of this information for you today.

The Government's massive use of asbestos products was a direct outgrowth of its need -- its urgency -- to build ships as World War II approached.[1] Asbestos was the only readily available high-temperature insulation which could meet the needs of developing engine technology.

The high strategic and technological regard in which the United States held asbestos is demonstrable by these facts: just prior to World War II, the Government began to stockpile raw asbestos; the Government declared asbestos to be a critical strategic material, and thereafter controlled its distribution and use; the Government itself became an importer of raw asbestos; the Government allocated its stockpiles of asbestos to selected private industries for military construction.[2]

During this unprecedented ship-building program -- in which the United States went from a one-ocean navy to a seven-ocean navy -- asbestos was not one of several insulation materials used by the Navy. It was virtually the only one used. The Government specifically required that asbestos be a central component in such products as pipe-covering, deck tiles, hull-insulating tile, cements, putty, block, preformed fittings, boiler parts, and cloth. Those companies which bid for ship construction contracts were required simply to meet these specifications if they were to produce their urgently needed products under wartime exigencies.

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[1] See H. Rogers and J. Friedman, Shipbuilding and the Defense Program (March 29, 1941); F. Lane, Ships for Victory (1951).

[2] See, e.g., O. Bowles, Asbestos, A Materials Survey, Bureau of Mines Circular 7880 (1959); Department of the Interior, Bureau of Mines Minerals Yearbook, 1942: Asbestos 2 (1943).

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The Government's use of asbestos was not in an information vacuum, however. The United States first learned of the hazards associated with the use of asbestos early in this century. In 1918, the United States Department of Labor specifically identified asbestos as seriously deleterious to the health of workers.[3] Following upon a second DOL study[4] in 1925, the Public Health Service conducted an extensive study of workers in "dusty trades," the results of which showed that eighty-eight percent of the workers -- including those who worked with asbestos -- demonstrated signs of pneumoconiosis.[5]

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[3] F. Hoffman, Mortality From Respiratory Diseases In Dusty Trades, United States Department of Labor, Bureau of Labor Statistics, Bulletin No. 23 (1918).

[4] L. Dublin, Occupation Hazards and Diagnostic Signs, U.S. Department of Labor, Bureau of Labor Statistics, Bulletin No. 306 (1922).

[5] The Health of Workers in Dusty Trades, Public Health Bulletin No. 176 (1928).

In 1933, the Department of Labor published a third edition of its guide to occupational hazards and disease, which stated in clear language that "asbestos had recently been definitely determined [to produce] a lung fibrosis."[6] The guide's most striking feature, however, is its recommendation -- made thirty-seven years before OSHA regulations went into effect -- that the amount of dust to which a worker was exposed should be controlled by the use of "air-fed helmets to cover the asbestos worker's head and neck."[7]

In his 1939 report to the Secretary of the Navy, the Surgeon General of the Navy noted specifically that "asbestos is an industrial disease of the lungs incident to the inhalation of asbestos dust for prolonged periods."[8] Yet, in 1941, the Commander in charge of the Navy's Division of Preventative Medicine could say: "I am certain that we are

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[6] L. Dublin, Occupational Hazards and Diagnostic Signs, U.S. Department of Labor, Bureau of Labor Statistics, Bulletin No. 582 (1933).

[7] See also M. Mettert, State Reporting of Occupational Disease, U.S. Department of Labor, Women's Bureau (1934); Lanza, et al., Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers: A Preliminary Study, 50 Public Health Reports 1 (January 4, 1935).

[8] Annual Report of the Surgeon General, U.S. Navy, Chief of the Bureau of Medicine and Surgery, to the Secretary of the Navy Concerning Statistics of Diseases and Injuries in the United States Navy for the Calendar Year 1939, at 24-5.

not protecting the men [from asbestosis] as we should. This is a matter of official Navy report from several of our Navy yards."[9]

In 1942, after devastation of our Pacific fleet at Pearl Harbor triggered the massive shipbuilding program in the United States, the Navy commissioned Dr. Phillip Drinker, Chairman of the Department of Industrial Hygiene at Harvard's School of Public Health, to survey twenty Government and federal contract shipyards as a basis for development of health and safety standards. These are the shipyards at which most of today's plaintiffs worked. The results of the surveys became the focal point of a joint Navy-Maritime Commission conference in December 1942, the purpose of which was to promulgate "Minimum Requirements for Industrial Hygiene and Safety in Shipyards." Dr. Drinker told conference participants that "asbestosis is caused in connection with the handling of asbestos. . . . *[W]e rather expect it to occur in shipyards, because we have seen asbestos being handled in installation work with little or no precautions*."[10]

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[9] "Memorandum from Commander in Charge of the U.S. Navy's Division of Preventative Medicine, C.S. Stephenson, to Surgeon General of the Navy, Admiral R. McIntire" (March 11, 1941), at 2. (Emphasis added)

[10] Minutes of "Minimum Requirements Conference," at 22. (Emphasis added)

Within two months of the Conference, in February 1943, the Navy and the Maritime Commission jointly promulgated "Minimum Requirements for Safety and Industrial Health in Contract Shipyards," copies of which were sent to all shipyards with explicit instructions that they were to comply fully and completely with the guidelines.

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Forty-one years ago, therefore, the Government recognized it had a responsibility to supervise contract and government shipyard workers, whose health and safety were being seriously compromised by exposure to asbestos-containing products. Moreover, the Government developed minimum standards which shipyards were required to follow. Its record of supervision and enforcement of these standards, however, was tragically poor.

Between 1943 and 1945 -- a mere two years after the promulgation of mandatory standards -- the Navy conducted more than 200 surveys of these shipyards. Most shipyards failed to meet even the minimum standards, and thus the hazard to workers was at an alarmingly high level. The Navy was aware of these breaches of mandatory requirements; however, it nevertheless failed to enforce them in any way determined to effect changes, choosing instead to commission an asbestosis study of pipecoverers installing insulation at two Navy yards and two contract shipyards, encompassing only 1,000 workers.

In 1946, the results of the government-sponsored Fleischer-Drinker Report showed a low incidence of asbestosis in shipboard pipecovering workers only.[11] The study, however, failed to mention the inherent hazards of "rip-out" work which the Navy knew created greater concentrations of free asbestos dust than did installation. Moreover, the study was inconsistent with the information the Government had compiled in the preceding twenty-eight years and would gather in subsequent years. The study was also one of the few the Government made public. Internal memoranda, however, make clear that the Government's perception of the health hazards associated with exposure to asbestos was far different from the survey results.

In the decade following World War II, the Navy continued to conduct studies and issue reports on the effects on shipyard workers of exposure to asbestos. It was not until 1955, however, that the Navy finally adopted the 5 million p.p.c.f. (particles per cubic foot) TLV (threshold limit value) for asbestos dust -- which the PHS had recommended in

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[11] W. Fleischer, et al., A Health Survey of Pipecovering Operations in Constructing Naval Vessels, Journal of Industrial Hygiene and Toxicology (January 1946).

1938. Yet neither the Navy nor any other Government agency formally required medical surveillance programs for asbestos workers until 1960.

By the 1960's the Government had amassed an impressive array of studies, surveys, and recommendations which focused specifically on asbestos-related health hazards. Notwithstanding the Government's superior knowledge, no Government-wide enforcement of any health standards was forthcoming.

In June of 1965, Dr. Irving Selikoff, Director of the Environmental Sciences Laboratory at Mt. Sinai Hospital in New York, published a report concluding that "[a]sbestosis and its complications are significant hazards among insulation workers in the United States at this time."[12] Dr. Selikoff was thereafter invited to testify before Congress on the Occupational Safety and Health Act of 1968. His conclusions are worth noting:

> It is evident that . . . we have failed those men [asbestos insulation workers in the New York-New Jersey areas]. They had every right to look to their government and public health authorities, and to physicians and scientists who guide

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[12] The Occurrence of Asbestosis Among Insulation Workers in the United States, Annals of the New York Academy of Science (1965).

> them, for protection at their work. They were not given that protection.[13]

Dr. Selikoff met subsequently with representatives of the PHS, the Bureau of Medicine and Surgery, and the Department of Labor to report on unusual incidence of asbestosis found by his staff during their performance of shipyard workers autopsies.

The Washington Post reported that Dr. Selikoff warned the Navy, DOL, and PHS that "the nation's 550,000 shipyard workers faced a serious occupational hazard from asbestos in their place of work. . ., [but] so far the three federal departments have made no public announcement of the report or its contents."[14]

An immediate flurry of activity followed publication of the article. Several internal memoranda clearly showed the Navy's awareness of the health hazards to shipyard workers due to prolonged exposure to asbestos.[15] Within one month of the meeting and the publication of the article, the Navy sent to each shipyard a package of documents, including the Washington Post article, on the hazards of asbestos.

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[13] Statement of Dr. Irving J. Selikoff Before the House Subcommittee on Education and Labor of the House Select Committee on Labor, on H.R. 14816, the Occupational Safety and Health Act of 1968 (March 7, 1968).

[14] "U.S. Warned of Asbestos Peril," The Washington Post, Dec. 4, 1968, A4, col. 1.

[15] For example, see "Memorandum from SEC 6100 to Ships 07," prepared by Captain W.R. Riblett (December 9, 1968).

The Navy's by-now-familiar response called for commissioning of yet another study of Navy use of asbestos products, exposure control measures, and the causal relationship between exposure and disease. Over the course of the next year, 1969 -- some twenty-six years after the 1943 "Minimum Requirements" had been issued to all shipyards -- the Bureau of Medicine and Surgery and the Naval Sea Systems Command evaluated, once again, the same shipyards which had repeatedly been "studied" for some three decades.

Despite the redundant studies, evaluations, and surveys, one activity was conspicuous in its absence: enforcement of health standards. In fact, in September of 1970, Admiral Hyman G. Rickover wrote to the Commander of the Naval Ships Command that:

> I am concerned that asbestos continues to be used extensively by the Navy in the fabrication, installation, repair and renewal of pipe and boiler insulation. Many years of medical research have firmly established the serious effects of inhaled asbestos fibers reaching the lungs and resulting in lung cancer and asbestosis. Although alternate materials have been available for years, NAVSHIPS has not taken action to prohibit

> underlying use of high asbestos content materials in insulation.[16]

At about this same time, Congress passed the Occupational Safety and Health Act ("OSHA") in 1970, which requires every employer to furnish his/her employees a place of employment free from recognized hazards that cause or are likely to cause death or serious physical harm. Enforcement is its cornerstone, but lack of enforcement apparently continued to plague the Navy.

In 1972, the Navy Environmental and Preventive Medicine Unit conducted an industrial hygiene survey of the Coast Guard Yard at Curtis Bay, Maryland. C.W. Baker, the officer in charge of the report, warned: "The current OSHA standard for exposure to asbestos...[contains] numerous requirements which must be met and which are not now being met."[17] Subsequent surveys in 1974 and 1976 of the same yard gave similar, apparently unheeded, warnings.

The 1970's witnessed further contradictions: The Government's own evidence linking prolonged exposure to asbestos with pulmonary disease continued to mount while enforcement of regulations or mitigation of the danger remained the province of studies and recommendations. For example, despite all the Navy knew, and despite seemingly endless warnings, incredibly, late in 1977 the Navy filled a shipyard's order for asbestos-free high-temperature thermal insulation cement with asbestos-containing cement, because the GSA would not supply asbestos-free cement until its stocks of asbestos-containing cement had been exhausted.[18]

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[16] Letter to NAVSHIPs from Adm. Rickover (Sept. 22, 1970).

[17] "Report of Industrial Hygiene Survey of Coast Guard Yard" (October 2, 1972) (emphasis added).

Two years later, the U.S. Comptroller General concluded that the Navy was even then continuing to take inadequate precautions to protect employees in its shipyards, and that the Coast Guard had not even implemented an asbestos Control Program or Asbestos Medical Surveillance Program until 1979.[19]

The Government's accumulation of knowledge about the harmful effects of exposure to asbestos forms the foundation on which liability must rest. The exigencies of the war effort may explain -- but they must not be allowed to excuse -- the Government's failure to enforce safety and health standards. In a strikingly analogous situation, District Judge Bruce Jenkins of Utah very recently held the Government liable for the health-related effects of open-air atomic testing from 1952 to 1963. In Allen v. United States, the court said that the case was "ultimately concerned with who in fairness should bear the cost of injury to those persons whose injury ... [was] caused ... by ... open air nuclear events." The Government must bear this burden, the court concluded, because the party with superior knowledge is in the better position to mitigate the risks of injury.

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[18] "Letter to Commander, Philadelphia Naval Shipyard from Commanding Officer, Navy Ships Parts Control Center" (October 11, 1977).

[19] "Letter to Hon. Glenn A. Anderson from Acting Comptroller General of the United States" (October 18, 1979).

* * *

My purpose in presenting these "Government knowledge" highlights is to impress upon you the need to include the Government in any compensation scheme ultimately devised.

Plaintiffs are caught in a tangle of workers' compensation and medical regulations which at best affords them arbitrary, inefficient, and tardy relief -- as Mr. James Vermeulen, the Director of Asbestos Victims of America, detailed for you in his April 24, 1984, testimony. Defendants such as the manufacturers we represent are subject to a staggering amount of litigation -- which has reached 700 suits per month against manufacturers who are already defending against 24,000 suits. Yet the Government rests comfortably in the knowledge that Federal workers' compensation statutes simply preclude suits by workers, their widows, or their children. As a result, these workers have brought suit against the only "available" defendants -- the manufacturers. As Mr. Leonard Rivkin, lead trial attorney for Dow Chemical in the "Agent Orange" litigation, recently noted, "the only reason the veterans are suing us is that they can't sue the government."[20]

No one should find this an acceptable solution to a problem the depths of which are just now beginning to be measured.

By way of conclusion, I want to underscore our firm conviction that any workable, practical, and equitable compensation system must include active participation by all who are the interlocking pieces in this complex puzzle. The Government must not be allowed to seek immunity.

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[20] 70 ABA Journal 30 (May 1984).

Tulane Medical Center
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June 7, 1984

The Honorable Don Nickles
Chairman, Subcommittee on Labor
UNITED STATES SENATE
Committee on Labor and Human Resources
Washington, D.C. 20510

RE: Labor Subcommittee Hearing on
Occupational Disease, April 24, 1984

Dear Senator Nickles:

This is a response to the questions sent with your letter of May 29th.

1. There should be two kinds of medical panels. The regional panels would be given the task of making factual determinations, on a case-by-case basis, whether or not an asbestos-related condition exists, and to what extent it impairs the individual. A central or national panel would be needed to furnish uniform guidelines for making such decisions. The national panel would be charged with the responsibility for continuously monitoring the medical and scientific knowledge about asbestos health effects and updating the diagnostic guidelines as needed, and on a timely basis. It would also be logical to have the national panel monitor the performance of all the regional panels to assure quality and uniformity of decision-making.

2. There should be a mechanism for appeal, but there should be a cost to the claimant who appeals unsuccessfully. Otherwise, everyone who initially receives an adverse ruling will automatically appeal, and the system will become cumbersome. Further, there should be no appeal from an initial finding that the evidence in a particular case is insufficient for a medical decision. The response to such a finding should be the submission of new evidence of the sort required by the panel, and this should be permitted without penalty. Finally, appeals should be restricted to the questions of inappropriate application of the guidelines to a particular case; challenges to the guidelines themselves should not be permitted under the appeals mechanism. This, of course, implies a need for some other kind of testing of the guidelines, perhaps under some streamlined mechanism of administrative law.

3. Congress can surely fashion a system that gives more money, in a more timely manner, to more asbestos victims, than does the workings of litigation. For such a system to succeed, however, medical findings must be central to the determination of which claimants have asbestos-related conditions, and who among them are seriously impaired. If the system is festooned with borrowings from the legal profession, such as irrebuttable presumptions based on exposures, or mechanisms for conjuring up a diagnosis (from inadequate medical data) for individuals long deceased, the result will be another Black Lung Law, i.e., a massive and costly parody of a reasonable compensation law.

The general means to avoid compensating for non-asbestos related conditions is a statutory requirement that compensation go only to individuals who are impaired, and whose impairments were probably caused, or substantially aggravated by, inhaled asbestos. The national panel, in formulating guidelines, should adhere to that requirement. In my view, this would result in rejection of, for example, claims based on obstructive lung function impairments in patients who smoked for decades, and have pleural plaques but do not have asbestosis (as detectable by x-rays). In my view, similar patients who do have asbestosis should be compensated, despite the fact that a proportion of the impairment is caused by smoking. Similarly, evidence of asbestosis might be a requirement for the determination that a lung cancer was probably the consequence of asbestos exposure. In each case, the test is reasonable medical probability. One more example: all malignant mesotheliomas occurring in persons with provable asbestos exposures fifteen or more years before onset would be compensable, irrespective of smoking status or coincidental asbestosis.

I greatly appreciated the opportunity to present my testimony at the subcommittee hearing. The questions put to me, at the time and later, clearly disclose a perceptive and thoughtful approach to the compensation problem. I should be glad to provide whatever help I can in the future. Please convey my best wishes for success in this endeavor to all your colleagues.

Very truly yours,

Robert N. Jones, M.D.
Associate Professor of Medicine

RNJ/kar

STATEMENT OF
COMMITTEE OF EQUITY SECURITY HOLDERS OF MANVILLE CORPORATION

(IN RE JOHNS-MANVILLE CORPORATION, ET AL.
DEBTORS, BANKRUPTCY Nos. 82B 11656 - 11676)
CHARLES RESNICK, ESQ., CHAIRMAN
HAHN & HESSEN, COUNSEL
SUBMITTED TO THE
SUBCOMMITTEE ON LABOR
OF THE
SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES
IN CONNECTION WITH THE
HEARINGS ON OCCUPATIONAL DISEASE
June 8, 1984

Mr. Chairman: We appreciate the opportunity to submit this statement on behalf of the statutory committee appointed to represent the Equity Security Holders of Manville Corporation. There are more than 23,500 holders of record of Manville's over 24,000,000 common shares, located in every state of the United States and the District of Columbia, as well as over 22,000 holders or record of the over 4.6 million preferred Manville shares, located in every State of the Union and the District of Columbia. The shareholders voice should be added to those discussing the problem of occupational disease and the need to explore a legislative solution.

Of the over 23,500 individual holders of record of the common shares of Manville Corporation, more than 20,700 are men, women and joint tenants; 185 are pension funds, profit sharing plans and labor unions. Over 10,000 holders of Manville common shares have fewer than 100 shares and over 21,000 Manville holders own fewer than 500 common shares. Manville's stockholders are diverse; most are individual investors, not large companies. The shares owned by all of the directors and officers of Manville represent less than .4% of the issued and outstanding shares of the company.

The Manville shareholder is sympathetic to the plight of the diseased worker. In fact many Manville corporation employees are also shareholders.

There is a pressing need for Federal legislation in this area. All present and future asbestos claimants are entitled to fair and just compensation. The issue is responsibility for the burden of such compensaton. The Subcommittee is to be commended for its interest in exploring a legislative solution to this problem by holding these hearings. The following points must be considered when the Subcommittee begins to examine specific proposals for a Bill.

1. Any Bill must include federal employees and take into account the role of the federal government. Enactment of a bill deficient in this regard would not adequately solve the problem as

a majority of asbestos claimants* would be left to the inequities of the present tort system while, at the same time, manufacturers and employers would be exposed to limitless liability which might result in other bankrupty proceedings.

There is no credible basis for excluding the federal government from the legislative scheme. As both an employer of workers exposed to asbestos and as a toxic substance market participant, the federal government has an obligation to asbestos claimants. Large numbers of workers were exposed to asbestos in government controlled shipyards during World War II and the Korean conflict. At the same time, the federal government did not comply with its own recommended asbestos exposure levels.** In addition, much of the asbestos used by the United States during and after World War II was not manufactured in the United States. Finally, several witnesses have testified the government had a major role in stopping the flow of information to workers about the dangers of their employment. For these and other reasons, we believe the federal government bears direct responsibility for the problem, and should not avoid the financial responsibilities concomitant therewith.

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* Manville measures fully 47% of present claims asserted against it belong to shipyard workers; GAF has testified that approximately 50% of all asbestos health claimants were exposed while employed by and at the facilities of the federal government; and the President of Raymark has testified that 80% of its claimants arose from ship construction during World War II and the Korean conflict.

**1939 Annual Report of the Surgeon General, U.S. Navy.

As both shareholders and taxpayers, we urge the Subcommittee to adopt a Bill which includes governmental contribution to the legislative scheme. Inclusion under this exclusive program will both avoid the costs of defending suits brought against the government by its employees and by industry, and obviate the need to pay numerous victims under existing federal programs.*

2. Any Bill providing for compensation to asbestos victims, which includes cancer of the lung in its categorization of diseases must properly apportion the responsibility. If the shareholders of industry are to share the burden of compensating lung cancer victims, then the tobacco industry must not be ignored. The vast majority of lung cancer cases among asbestos workers involve heavy smokers. While there may be some connection between asbestos and lung cancer, the major cause of lung cancer, even among asbestos workers, is tobacco. Clearly, the burden for compensating these workers or their families should be equally borne by the tobacco industry.

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* One study, funding for which was provided by Manville, suggests inclusion under Federal legislation will result in a net savings to the government. See the March 1983 Urban Institute Research Paper entitled "Compensation for Victims of Asbestos-Related Diseases: Potential Cost Savings for the Federal Government" for details.

3. The asbestos occupational disease problem was caused by behavior patterns from forty and fifty years ago. Accordingly, the notion of punitive damages should not be factored into any legislative proposals. If punishment is exacted, it would be from the shareholders of today, not from the shareholders of the past, and would include the unions and pensions funds holding the stock of such corporations as Manville. Punitive damages do not help; a practicable solution is imperative.

4. Whatever legislative scheme is ultimately adopted, it should be the exclusive remedy for the affected workers. Whether or not the workers would receive their benefits as a supplement to workers compensation or in lieu of workers compensation, the legislative scheme should mandate benefits under the Act as the exclusive form of compensation. There should not be any provision which could permit a return to the tort system; otherwise the goal of legislation to provide prompt and equitable compensation within its scheme, obviating the need to resort to a tort system which has been called inequitable, inefficient, and costly, will be stymied. If exclusivity is not accomplished, private industries' future liability for asbestos claims will remain inestimably high. This may cause other corporations to take advantage of the Bankruptcy Code and create difficulty in confirming any reorganization under the Code, resulting ultimately in fewer dollars for claimants. In addition, if the legislative scheme gives workers both their

full medical benefits and prompt and equitable compensation, there should be no need for resort to the tort system.

The costs of litigation are enormously high. As has been previously testified, the majority of sums expended in tort litigation, especially concerning asbestos and other occupational diseases, go to attorneys. A legislative scheme eliminating the option of litigation would save many dollars which could be available for distribution to victims.

On behalf of all of the shareholders of Manville, we look forward to prompt passage of legislation in this area, and wish to thank the Chairman and the Subcommittee for this opportunity to be heard.

THE JOHNS HOPKINS UNIVERSITY
SCHOOL OF MEDICINE
and
THE JOHNS HOPKINS HOSPITAL

DEPARTMENT OF RADIOLOGY
AND
RADIOLOGICAL SCIENCE

Mailing Address:
THE JOHNS HOPKINS HOSPITAL
Baltimore, Md. 21205

May 1, 1984

Senator Don Nickles
c/o Mr. Rick Lawson
United States Senate
608 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Nickles:

Thank you for the opportunity to present our concerns about the present wave of asbestos litigations along with some simple solutions which involve nothing more than requiring proof of claimed disease which would meet modern medical diagnostic standards.

Of the 28,000 asbestos-related claims, only a small percentage will have the documented fibrosis of mid and lower lungs (as shown by x-rays and restrictive pulmonary function studies) and the rest will be simple benign pleural plaques judging from our experience with industrial workers in Baltimore. If the small group with good evidence of lung fibrosis wishes to file a claim, it should be based on valid microscopic evidence because that is the only precise way to establish the diagnosis of any pneumoconiosis. If a worker is too ill for biopsy and has no histologic proof, a claim could be granted provided future proof is made available either at the time of chest surgery or with a mandatory autopsy after death. This system would provide valid scientific evidence for the claim and would protect the worker and the company.

Our experience with the Black Lung Compensation program has been discouraging because it set the precedent for the use of nonspecific x-ray evidence as the basis for a claim. This was in spite of the fact that the International Lebor Organization Pneumoconiosis Commission wanted the classification used only for quantifying disease. The comparison between black lung and asbestos-related disease claims is frightening as shown by the following Table:

DUST TYPE	PEOPLE EXPOSED	DISEASES WITH SAME X-RAY FINDINGS	CLAIM $
Asbestos	Many	Many	Large
Coal/ Silica	Few	Few	Relatively Small

The product for the categories in the asbestos column is large and the product for the categories in the black lung column is small on a yearly basis but with 40 years of expected life would also be large.

One of the comments quoted after the testimony on April 24th, was the fact that there are "spurious claims" for asbestosis. We know there are spurious claims for silicosis based on an investigation by Special Agent Carter Elliott which we requested several years ago. Unfortunately, the diagnostic criteria for establishing a claim of asbestosis are so weak that there are probably no spurious claims. Virtually every claim will have an x-ray report describing some abnormality either of the lung or pleura which might be "compatible with asbestosis." We feel the bulk of these claims are for simple benign pleural plaques that need no compensation because they are asymptomatic.

One other point which may not have been stressed has to do with the diversion of corporate funds for legal defenses away from much needed research, development, and modernization. This is an era of global high technology and many of our companies are being made noncompetitive both for the short term and the long term. If claims are proven by modern diagnostic standards, then asbestos and cigarette manufacturers should pay compensation. Our deepest concern is that most of these cases are not adequately proven as demonstrated by the fact that we can find no source which can tell us what percentage of settled cases were for (1) histologically proven pulmonary asbestosis (2) simple lung fibrosis with x-ray evidence alone, and (3) pleural plaques alone.

Thank you again for the opportunity to present our information which is based on a long experience with the radiologic evaluation of pneumoconiosis. I only wish it had been possible to show slides because radiology is a graphic art and one picture showing the difference between pleural plaques and pulmonary fibrosis is worth a thousand words.

Sincerely yours,

Paul S. Wheeler MD

Paul S. Wheeler, M.D.
Associate Professor of Radiology

PSW/mes

Chamber of Commerce of the United States
HUMAN AND COMMUNITY RESOURCES DEPARTMENT

1615 H STREET, N.W.
WASHINGTON, D.C. 20062

June 29, 1984

The Honorable Don Nickles, Chairman
Subcommittee on Labor
Committee on Labor and Human Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed is a copy of our reply to Senator Riegle's questions on occupational disease, as requested in your letter of June 20, 1984.

Sincerely,

Eric J. Oxfeld

Manager, Health Care &
Employee Benefits

Chamber of Commerce of the United States of America
Washington

July 2, 1984

REPLY TO SENATOR RIEGLE'S QUESTIONS ON
OCCUPATIONAL DISEASE

1. The U.S. Chamber supports S. 44, the proposed federal product liability reform act, which would establish an equitable product liability tort system for the protection of the public, bring certainty to the law, and ease what has become a serious burden on the public. S. 44 will strike an equitable balance between the rights of individuals and manufacturers.

With respect to injuries, including diseases, that result from work place use of a product, S. 44 in no way diminishes workers' rights to recover no-fault workers' compensation from their employers, and it will fully enable injured individuals to bring product liability claims against manufacturers. In fact, it will improve the situation for them in many states. For example, the bill establishes a "discovery" statute of limitations, enabling injured parties to bring claims within two years after they have discovered both the harm and the cause of an accident. At present many states cut off the right to sue before injured individuals know or have reason to know of their injury. Some states use the time of "exposure" to the product. In others, the statute of limitations runs from the date when the person "has been harmed." Still others use the time that the disease was "diagnoseable." The provision in S. 44 is far more protective than all of these standards.

Furthermore, the liability standard in S. 44 for both warnings and design compares favorably with the law of the overwhelming majority of states. It requires that manufacturers exercise "reasonable prudence," which includes "the care, attention, knowledge, intelligence, and judgment that society requires of its members for the protection of their own interest and the interest of others. . . ." This standard imposes the highest degree of responsibility on manufacturers of products and allows courts to increase the severity of that responsibility as scientific knowledge improves.

In addition, S. 44 preempts the work place statutes of repose that now cut off claims (in approximately 16 states) six, ten, or twelve years after the time of manufacture. The bill contains a 25-year statute of repose, with a specific exception for latent injuries -- injuries that may be caused by hazardous substances.

The foregoing provisions create strong financial and other incentives to develop safe or safer products by expanding the rights of injured individuals. Other provisions in S. 44 will also create direct incentives for manufacturers to improve the safety of their products. For example, the bill includes a new continuing duty to warn, which effectively imposes liability on manufacturers if they fail to advise of risks after the product has been made. This requirement will be a major advance in promoting safety and will help protect individuals who might be injured by hazardous substances. In addition, S. 44 encourages manufacturers to make new improvements in safety, because (1) it does not permit such improvements to be used against manufacturers in suits involving older products, and (2) it permits manufacturers to attempt to mitigate punitive damages by showing that they acted promptly to terminate a risk when they learned about it.

Finally, by having one set of product liability laws carefully directed at incentives for safety, safety will prevail. The current system subjects manufacturers to conflicting rules governing what is safe conduct. This uncertainty is an impediment to efficient, safe practices. In sum, S. 44 will provide a clear, strong, financial incentive to make safe products.

2. Prevention of occupational health hazards, including diseases, is a serious concern of the U.S. Chamber and the business community in general. Although great strides have been made in addressing these hazards in recent years, major problems remain which can best be addressed by a cooperative effort involving all affected parties.

There is a need for more scientific research and technical support to and within government so that more knowledgable policy-making can occur at the Occupational Safety and Health Administration (OSHA) and other regulatory agencies. Too often in the past, OSHA has not had a sufficient scientific basis for its decisions, nor has it effectively solicited and addressed the recommendations and concerns of the wide range of affected parties. OSHA needs to take into account the realities of the work place so that rule-making is carried out with recognition of the practical considerations of technical and economic feasibility. There has been an improvement in this regard under the Reagan Administration.

The federal government also can help improve the safety and health of workers by encouraging employer and employee cooperative programs and providing additional education and training. Most importantly, OSHA must maintain fair and even-handed enforcement of the Occupational Safety and Health Act, which is targeted to those work places where OSHA can have the greatest impact. The role of the federal government can be most effective to the extent that it is geared to being the helpful consultant, when appropriate, rather than the strong-armed policeman.

Identification and communication of work place hazards is addressed in the recently-promulgated Hazard Communication Standard. This standard should provide consistency, while preempting various conflicting and deficient state and local labelling and right-to-know laws. A single federal standard which requires (1) the labelling of hazardous containers, (2) material safety data sheets, (3) effective record-keeping and communication of work place health hazards, and (4) employee education and training -- if equitably enforced -- will serve as a major step towrad identifying and abating occupational hazards.

Additionally, OSHA has an Access to Medical and Exposure Records Standard which gives employees and other appropriate persons access to relevant information. In conjunction with the Hazard Communication Standard, OSHA now provides adequately for the identification of hazards and protection of employees.

3. The U.S. Chamber strongly supports the state workers' compensation system for the protection of workers disabled or killed as the result of traumatic injury or occupational disease arising out of and in the course of employment. The states voluntarily have made enormous improvements to all aspects of their workers' compensation programs, including provisions governing occupational disease. These improvements continue.

There are conflicting estimates of the incidence of occupational disease, including illness related to asbestos exposure in the work place. While some forecasters are predicting growing numbers of occupational disease victims, others believe that improved work place health and safety practices have reduced the amount of exposure. There is some evidence that the incidence actually is declining.

The true incidence of occupational disease, however, has little relationship to the adequacy of workers' compensation generally and specifically with respect to compensation for workers disabled by occupational diseases. Each state program is tailored to meet the specific needs of workers and employers located there, albeit many are in need of improvement to contain the rapid cost increases caused by expansion of cash awards and coverage without adequate attention to efficient administration. Although the 1972 recommendations of the National Commission on State Workmen's Compensation Laws were widely accepted as benchmarks when they were issued, today they are no longer regarded as a meaningful measure of the adequacy of a state's program. In fact, nothing illustrates this point better than the fact that all states now fully comply with the Commission's recommendations on occupational disease, yet the employer and insurance communities have broadly agreed that additional changes in some state occupational disease laws would be desirable.

Moreover, while the states did not always follow the letter of the Commission's recommendations, most are in substantial compliance with them, and all have acted in the spirit of the Commission's report. Ironically, the Commission's emphasis on higher benefits (easy to evaluate) without regard to properadministration (difficult to evaluate) is thought by many experts to have contributed to the huge cost increases over the last twelve years. These costs have added to unemployment by making it more expensive to hire and more difficult to meet international competition.

Although at one time occupational disease was not compensable under many state workers' compensation programs, today all states compensate all diseases and on the same basis as traumatic injuries.

Antiquated provisions do remain in a handful of state laws -- chiefly statutes of limitations for some diseases that run from the date of last exposure, and/or benefit formulas that compute compensation based on wages at last exposure. These provisions affect only a small number of claims. However, broad efforts by employer and insurance groups are under way to modernize the laws in these states.

The record of voluntary improvement in state laws is encouraging. On the other hand, the poor track record of federally operated compensation programs is not. For these reasons, we oppose federal programs designed to replace, supplant, or supplement state workers' compensation.

4. There is some evidence that injury can occur to family members of workers exposed to hazardous substances on the job, because particles or fibers may be borne into the home on the worker's clothing or person. Family members are not covered by workers' compensation laws but do have recourse to the tort system on the same basis as others injured outside the work environment. In addition, nonoccupational disability may be compensated by employer-provided health and disability benefits, and disabled individuals who have held jobs can receive Social Security Disability Insurance. Our ad hoc National Business Council on Injury Compensation is reviewing whether there is need to modify existing compensation systems and/or create new ones to address the needs of workers' family members and others injured as a result of environmental exposure.

5. The U.S. Chamber has not yet taken a position on S. 2708 (Percy, R-Ill.), the recently introduced Asbestos Workers' Recovery Act, but we are taking a close look at it. The bill is supported by some of our members who have been involved in the asbestos litigation. However, we recognize that the proposal raises serious policy questions, including its impact on workers' compensation and other programs. At present the bill is being reviewed by our ad hoc National Business Council on Injury Compensation as well as other standing policy committees of the Chamber.

Prepared by Eric J. Oxfeld
Manager, Health Care & Employee Benefits
(202) 463-5514

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Executive Offices

June 29, 1984

Honorable Don Nickles
Chairman
Senate Subcommittee on Labor
SH-608 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Nickles:

In accord with your letter of June 20, 1984, attached are Manville's responses to the additional questions posed by Senator Riegle in connection with the Subcommittee's May 21 hearing on occupational disease. I understand that these questions and answers will be made a part of the permanent record of that hearing.

If we may provide any additional information to the Subcommittee, please do not hesitate to contact me.

Respectfully,

David E Pullen

David E. Pullen
Manager, U.S. Government Affairs

Attachment: Questions from Senator Riegle and Corresponding
Responses by Manville

MANVILLE CORPORATION ANSWERS TO THE ADDITIONAL QUESTIONS POSED BY SENATOR RIEGLE

Question #1

It has been said that the Manville Corporation has sought refuge under Chapter 11 of the Bankruptcy Code to protect it from otherwise legitimate claims brought by asbestos victims. How do you respond to this assertion? How do you plan to address the claims of future plaintiff suits (i.e., those victims whose disease has not yet manifested itself)?

Answer

Manville's petitions for reorganization under Chapter 11 were filed August 26, 1982, and were initiated in part to ensure that asbestos claimants were given equal footing with all other creditors to obtain some portion of Manville's assets. In light of the information that became available to the company in early August of that year, Manville for the first time was able to estimate that it would become a named defendant in at least 32,000 additional asbestos-health lawsuits, over and above the 3,500 suits that had already been resolved and the 16,500 such suits then pending against it.

Standard rules of accounting applicable to publicly-held companies require the booking of a reserve sufficient to satisfy known and estimatable contingent liabilities. In Manville's case, this would have been a sum approaching $2 billion for estimated asbestos-health claims, compared to the company's net worth of approximately $1.1 billion. With public disclosure of this information and the necessity of booking the reserve, Manville's lenders would likely have sought to secure their outstanding loans to the company against the corporation's assets. At a minimum, Manville's ability to function in credit and commercial markets would have been seriously impaired, and more likely its continued existence was threatened.

Given this alternative, the company's Board of Directors believed it was compelled to file its Chapter 11 petitions promptly, before some creditors (its banks, for example) were given a secured, or preferential, position over any other creditors (such as asbestos claimants).

In recognition of its obligations to persons injured by exposure to its asbestos products, the plan of reorganization offered by the company in November, 1983, proposes an explicit, medically sound, set of procedures by which to satisfy its obligations to asbestos claimants. In the Manville plan, asbestos claims would be dealt with on a "no-fault" basis, with compensation based upon the degree of asbestos-related physical impairment and each claimant's personal circumstances. Under such plan, asbestos claimants would have received, on average, net payments that are about 25% higher than they have received historically from Manville through the tort litigation system.

So, far from using Chapter 11 as a "refuge" from asbestos claims, the company has sought to establish a fair and uniform procedure through which it can satisfy its obligations to asbestos claimants as well as all other creditors.

With respect to future claims, as Bankruptcy Judge Burton R. Lifland has stated,

> "From the inception of [the Manville] case, it has been obvious to all concerned that the very purpose of the initiation of these proceedings is to deal in some fashion with claimants exposed to the ravages of asbestos dust who have not as of the filing date manifested symptoms of asbestos disease."

And further in the same opinion,

> "...future claimants are indeed the central focus of the entire reorganization. Any plan not dealing with their interests precludes a meaningful and effective reorganization and thus inures to the detriment of the reorganization body politic. Any meaningful plan will either provide funding for future claimants directly or provide for the continuation of some form of responsive, ongoing entity post-confirmation, from which to glean assets with which to pay them."

Manville agrees completely with Judge Lifland that future asbestos claims must be provided for in some way. The state of the law is uncertain as to how this may best be accomplished. The case law that has evolved subsequent to Manville's filing of its Chapter 11 petitions suggests that it may not be possible to affect the existing legal rights of future claimants. In recognition of this possibility, the company's proposed plan of reorganization is permissive with respect to future claimants, i.e., future claimants would participate in the uniform procedures intended to be applied to all present claimants, but are not compelled to abide by the results of such procedures.

Finally, it should be noted that the plan of reorganization offered by the company has not been formally accepted by any of the creditor committees in the Chapter 11 proceedings. Negotiations toward a consensual plan continue in earnest, particularly with the Official Committee of Asbestos Health

Claimants, and significant progress has been made in designing a conceptual framework for such a reorganization plan, which would deal with both present and future claims.

Question #2

Several legislative solutions to address the problem of occupational disease compensation have been introduced in the Congress during the past decade, including some dealing with asbestos. Do you believe that a non-federal solution is viable to resolve the asbestos problem?

Answer

Manville has been an advocate of a federally-legislated solution to the asbestos tragedy since 1975, and continues to hold that view today. As our written testimony filed with the Subcommittee indicates, Chapter 11 is not a mechanism that society should accept as a means by which to address occupational disease issues, nor is it a vehicle that will resolve the entire matrix of asbestos issues for all parties involved. But in the absence of Congressional action, Manville's only viable course is to seek a resolution through its Chapter 11 proceedings.

If for no other reason than to determine the United States Government's own obligations to asbestos claimants, which are substantial, action by the federal legislature is required. Additionally, even if Manville and the other companies currently undergoing reorganization can develop uniform procedures for compensating asbestos claimants, the remaining defendants may continue under the existing, inequitable, tort litigation system. Indeed, the only way to assure that all present and future asbestos claims are resolved fairly and uniformly, using standard criteria, is through a federally legislated remedy.

Even if a coordinated defense/claims-handling facility is established by some defendants, legislative action may be required to address other aspects of the asbestos issue: government responsibility, inter-relationships between tort awards and other existing benefit programs (e.g., state and federal workers' compensation, Social Security Disability payments), dissimilar awards to equally disabled claimants, burden of the asbestos caseload upon the state and federal judiciary, etc.

Question #3

Asbestos-related disease is only one of several diseases arising from exposure to hazardous substances in the workplace. The Miller bill (H.R. 3175) includes a "triggering mechanism" whereby other occupational diseases would merit compensation if certain scientific evidence is established. Do you believe that a legislative scheme enacted by Congress should compensate only asbestos-related diseases, or other occupational diseases as well?

Answer

Referring again to our written testimony, Manville believes that a federally-legislated compensation program should be limited to the asbestos-diseases at this time. We are aware of no other toxic tort problem that is comparable in all respects to the asbestos tragedy, where: the injurious exposures occurred decades ago, in the course of employment in several workplaces; the causal relationship between exposure and resulting injury has been as carefully studied and documented; the federal government is itself a dominant participant in the creation of the tragedy; and the sheer volume of cases threatens to overwhelm the ability of existing institutions to handle them, both now and for the forseeable future.

If equally compelling evidence becomes available involving exposures to other toxic substances, then they, too, should be considered in a legislated remedy. But again, we are aware of no such comparable situations at this time.

Question #4

Workers exposed to asbestos fibers often brought those fibers home on their clothing. Evidence indicates that spouses and dependents of asbestos workers have contracted some of the same diseases suffered by the workers themselves. Do you believe that a legislative scheme enacted by Congress should compensate spouses and dependents of workers if they can establish the existence of these same diseases?

Answer

Yes. In each of the several legislative approaches that Manville has supported over the years, asbestos-related injuries contracted by spouses or dependents living in the same household have been designated compensable injuries. While having experienced relatively few claims of this kind, Manville considers such cases to be "para-occupational" (i.e., but for the occupational exposure of the worker, the spouse or dependent would not have been injured).

GENERAL ELECTRIC
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WASHINGTON, D.C. 20004

MARTIN F. CONNOR
WASHINGTON CORPORATE COUNSEL

(202) 637-4116

July 3, 1984

The Honorable Don Nickles
Chairman
Subcommittee on Labor
Committee on Labor and Human Resources
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The National Association of Manufacturers is pleased to respond to the questions submitted by Senator Riegel to be answered for the record of the May 21, 1984, Senate Labor Subcommittee hearing on occupational disease.

1. You claim that the asbestos problem is a tort liability problem, not a workers' compensation problem. For this reason, you suggest that preemption of the tort system might prove appropriate. Testimony has indicated that substitutes were developed for asbestos as a result of the tort liability faced by those companies manufacturing asbestos products.

    o What financial incentives would exist for manufacturers to develop safe or safer products if the users (especially workers) of their products could not file product liability lawsuits?

It is certainly true that one of the important functions of the product-liability tort system is that it provides manufacturers and sellers of products with incentive for product safety. (The system's other functions are compensation of persons harmed by defective products and punishment of manufacturers and sellers who have recklessly disregarded the safety of product users.) One of NAM's basic criticisms of proposals for creation of federal administrative systems to compensate persons harmed by occupational or other exposures to toxic substances is precisely their elimination of such incentives. It is also certainly true, ar the question suggests, that the prospect of tort liability for harms caused by exposure to asbestos has led manufacturers to reconsider the design of asbestos-containing products. Where adequate substitute materials are available, there has been a general replacement of asbestos in both consumer products and producer goods.

We submit, then, with respect to asbestos, that the incentive effect of prospective tort liability has been substantially achieved. And even if this were not the case, the Environmental Protection Agency has a plan, which it is expected to announce formally in November 1984, to phase out all uses of asbestos over the next decade. The overriding issue today is prompt and equitable compensation of persons harmed by exposure to asbestos.

2. You suggest that any federal remedy should be addressed only to asbestos-related diseases because only these claims have clogged the courts. Evidence indicates that workers have contracted other diseases as a result of exposure to other hazardous substances on the workplace.

   o Why shouldn't a legislative scheme compensate the victims of these other workplace diseases?

   o Should the amount of product liability litigation be the sole determinative factor regarding which diseases to compensate?

Workers have, of course, contracted diseases as a result of workplace exposure to substances other than asbestos. NAM sees no evidence, however, that their claims cannot be handled fairly and efficiently in existing worker compensation and product liability systems. As we pointed out in our testimony, the fact that those claims present very difficult questions -- questions for which in many instances, medical science still has no certain answers -- is no reason to create a federal compensation system. "What is desperately needed," we said, "is that we identify the deficiencies of existing state systems and devise effective and feasible solutions. Whether we implement those solutions at the federal or state level is almost a secondary question, although common sense suggests that corrective action first be attempted at the state level."

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NAM's position is not that "the amount of product litigation [should] be the sole determinative factor regarding which diseases to compensate." We have concluded that, in the single instance of asbestos, such circumstances as the number and complexity of cases, the resulting overload of the judicial system, the uncertainties of insurance coverage and the potential insolvency of defendants argue for a solution specifically tailored to the problem. There is no reason to believe today that any other class of occupational disease cases will share these characteristics of the asbestos litigation.

3. Compensation becomes an issue only after diseases arise from workplace exposure. I believe that we must do more to prevent the occurrence of occupational diseases. Prevention of these diseases would have spared workers and their families untold agony and would have saved companies billions of dollars.

   o How can we insure that identification of and protectioon from disease-causing substances in the workplace will occur?

   o Do you support further methods to restrict workers' exposure to hazardous substances in the workplace?

   o What role should the federal government play in this arena of prevention?

NAM certainly agrees that every effort should be made to prevent the occurrence of occupational disease. The Occupational Safety and Health Administration has been given, however, a Congressional mandate for achievement of workplace health and safety. Institutions and processes are in place for the identification of and protection of workers from disease-causing substances. We do not believe that further legislation is needed. It must always be borne in mind that the scientific uncertainty which makes compensation so difficult an issue also impacts workplace regulation. Our efforts to assure workplace health and safety will always be subject, unfortunately but necessarily, to the limitations of current understanding of the etiology of occupational disease.

4. At the end of your testimony, you indicate that possible solutions should include the "intelligent use of independent panels of medical and scientific experts."

- o Please elaborate as to how such panels would function in any legislation designed to compensate the victims of occupational diseases.

NAM has no original proposal for inclusion of independent panels of medical and scientific experts in legislation designed to compensate victims of occupational disease. A number of such proposals have been made which deserve serious attention. We would particularly recommend further consideration of three of them. They are all framed in terms of state worker compensation systems but could be adapted to a federal system.

Dr. Peter Barth has, for example, in his 1980 book Workers Compensation and Work-Related Illnesses and Diseases, proposed that a panel of health specialists be established to receive evidence on questions of etiology and extent of disability in occupational disease claims and report on these two issues to the compensation adjudicator. He would leave decisions regarding compensability with the boards and courts while questions of medical fact would be resolved conclusively by medical panels.

Crum and Forster's Occupational Disease Task Force, in its June 1983 report, proposed a similar plan. There would be a national independent nonprofit organization to compile relevant data from various medical and scientific disciplines and provide this information to the states for use in administering their workers' compensation systems. Each state would establish a panel known as a "Compensation Evaluation Unit" (CEU), which would develop medical guidelines and procedures for determining the compensability of occupational disease claims. Thus, as in Barth's proposal, there would be the prospect of generic resolution of certain issues which are disputed over and over again today in individual cases. A "Disability Evaluation Unit" (DEU) would be established within the state's appropriate administrative agency and would determine the extent of disability in individual occupational disease cases.

The CEU, would be made up of qualified medical and administrative personnel knowledgeable in occupational disease and in the state's worker compensation law. It would make the initial determination of compensability in all occupational disease claims. This determination would be presumptively valid in any later administrative or judicial proceeding. If the CEU were to determine that the injured worker's claim is compensable, the employer which last exposed the worker to the substance causing disability would be responsible for immediate payment of temporary disability benefits and provision of medical treatment. The case would be referred to the DEU for a determination of the extent of disability. The Crum and Forster Task Force believes that separation of the issues of compensability and extent of disability will result in a simpler, fairer and more efficient system.

Testifying on behalf of the American Lung Association and the American Thoracic Society before the House Subcommittee on Labor Standards in 1983, Dr. Hans Weill of Tulane University Medical Center outlined a particularly thoughtful proposal for assessing compensability of asbestos-related diseases. Although his remarks were addressed to a specific bill, H.R. 3175, they are applicable generally to occupational disease compensation. Dr. Weill recommended, first, the establishment of a national panel of experts to develop and periodically modify guidelines and criteria for the adjudication of claims for asbestos-associated diseases. Then state panels of experts would make case-by-case determinations of work-relatedness and degree of impairment. The need for highly experienced panel members who are "maximally immune from short-term political influences" was stressed. Dr. Weill argued forcefully that the only hope of achieving some measure of rationality and equity in occupational disease compensation is to rely upon available scientific and medical knowledge. We would urge the Subcommittee to consult his statement.

5. Senator Percy recently introduced S. 2708, the "Asbestos Workers' Recovery Act."

   o Does NAM support the enactment of this legislation?

NAM would not oppose legislation generally on the lines of S. 2708, the "Asbestos Workers' Recovery Act." Without a great deal more study we could not say that we have no objections to any aspect of this very complex bill. We would, however, be delighted to work with the Subcommittee in detailed analysis of this or any similar legislative proposal.

We wish to express once again our gratitude to the Subcommittee and its Chairman for the opportunity to testify and to submit these additional responses.

Sincerely,

Martin F. Connor
Chairman
Toxic Injury Task Force
National Association of
Manufacturers

U.S. Department of Justice
Civil Division

Deputy Assistant Attorney General

Washington, D.C. 20530

August 10, 1984

Honorable Don Nickles
Chairman
Subcommittee on Labor
Committee on Labor and Human Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

The following are the responses to Senator Riegle's questions, in connection with my testimony at the Senate Labor Subcommittee's hearing on occupational disease, which you transmitted to Assistant Attorney General Robert McConnell on June 20, 1984.

1a. WAS THE U.S. GOVERNMENT INVOLVED IN THE PROCUREMENT OR IMPORTATION OF ASBESTOS DURING WORLD WAR II?

In 1940, a conference was held at the National Defense Commission. In attendance were representatives of various government agencies, importers, and asbestos product manufacturers. The purpose of this conference was to ascertain if proper action was being taken to ensure the production and importation of adequate supplies of asbestos fiber. Based on the results of this conference, a recommendation was made that the government purchase, for stockpile, African asbestos fiber.

No action was taken on this recommendation, or other ones similar in nature, until January, 1942, when the British Ministry of Supply and the United States Board of Economic Warfare entered into a Memorandum of Understanding on the apportioning of supplies of African asbestos (Enclosure 1). The two representatives agreed to regulate the importation of African asbestos and, by apportioning 1943 production, to create, by January 1, 1944, stocks of asbestos equivalent to one year's consumption.

The Memorandum of Understanding was approved and effected in London on April 30, 1943, by the exchange of notes between the British Secretary of State for Foreign Affairs and the American Ambassador.

1b. DID THE U.S. GOVERNMENT PROVIDE SPECIFICATIONS FOR THE IMPORTATION OR PURCHASE OF ASBESTOS?

Contained in the Memorandum of Understanding was the identification of various types or grades of asbestos fiber covered by the agreement. These grades were common terms used by the asbestos mining and manufacturing industries to identify certain types of fiber. To the best of our knowledge, no specifications, as such, were issued pursuant to this agreement.

1c. WAS THE U.S. GOVERNMENT A PRODUCT MANUFACTURER OF ASBESTOS PRODUCTS IN ITS OWN RIGHT?

The United States government has never manufactured asbestos products in its own right.

2. IN YOUR TESTIMONY, YOU NOTE THAT PAST COMPENSATION PROBLEMS HAVE BEEN DEALT WITH ON A PIECEMEAL BASIS. THE MILLER BILL (H.R. 3175) INCLUDES A "TRIGGERING MECHANISM" WHEREBY VICTIMS OF OCCUPATIONAL DISEASES OTHER THAN THOSE ARISING FROM ASBESTOS EXPOSURE WOULD RECEIVE COMPENSATION IF CERTAIN SCIENTIFIC EVIDENCE IS ESTABLISHED. THIS "TRIGGERING MECHANISM" APPEARS TO ADDRESS THE ISSUE OF OCCUPATIONAL DISEASE COMPENSATION ON A COMPREHENSIVE BASIS. DOES THE ADMINISTRATION SUPPORT THIS "TRIGGERING MECHANISM" CONCEPT?

We do not believe that a general federal solution is needed for the compensation of occupational disease. What I said in my testimony was that, given our finite resources, we need to consider carefully which groups will benefit from the creation of special compensation schemes, and how much they are to be paid, before adding schemes. We must realize that compensating one group reduces the overall quantum of resources available to others in the society who may have equally serious problems.

3. YOU HAVE SUGGESTED IN YOUR TESTIMONY THAT ALTERNATIVES TO THE TORT SYSTEM COULD BE DEVELOPED TO COMPENSATE OCCUPATIONAL DISEASE VICTIMS. ONE POSSIBLE SOLUTION THAT YOU MENTION IS A PRIVATE DISPUTE RESOLUTION SYSTEM. PLEASE ELABORATE AS TO HOW THIS SYSTEM MIGHT FUNCTION TO COMPENSATE OCCUPATIONAL DISEASE VICTIMS.

As an example of one such alternative, Enclosure 2 describes the Asbestos Claims Facility. Created as a result of discussions among the Asbestos Claims Council ("Wellington Group"), which includes many of the asbestos manufacturers and their insurers, the Facility is intended to facilitate the out-of-court resolution of claims.

4. WHILE MUCH OF THE TESTIMONY THAT WE HAVE HEARD FOCUSES ON THE COMPENSATION OF OCCUPATIONAL DISEASE VICTIMS, I AM CONCERNED WITH THE PREVENTION OF OCCUPATIONAL DISEASES AS WELL. SOME HAVE SUGGESTED THAT CONGRESS ENACT LEGISLATION TO REQUIRE THE IDENTIFICATION OF HIGH RISK WORKER POPULATIONS AND TO MONITOR THESE WORKERS' EXPOSURE TO HAZARDOUS SUBSTANCES IN THE WORKPLACE. DOES THE ADMINISTRATION SUPPORT A LEGISLATIVE SCHEME ALONG THESE LINES? WHAT PREVENTATIVE SOLUTION DOES THE ADMINISTRATION RECOMMEND TO ENSURE THAT ANOTHER ASBESTOS PROBLEM DOES NOT DEVELOP FOR WORKERS EXPOSED TO OTHER HAZARDOUS SUBSTANCES?

While a broader solution to the problems of workplace exposure has much to recommend it, countless new issues would be raised in attempting to include other substances such as benzene or cotton dust. The policy issues relating to this can better be answered by the Labor Department.

The prevention of other asbestos problems requires carefully formulated and rigorously enforced, regulatory programs. The Occupational Safety and Health Administration (OSHA) has a program to regulate workplace exposure to asbestos. In November of 1983, OSHA promulgated a new emergency temporary standard lowering the permissible exposure levels of asbestos in workplaces. Unfortunately, the Fifth Circuit Court of Appeals refused to allow this standard to go into effect in response to a suit filed by industry groups. Asbestos Information Association of North America v. O.S.H.A., 727 F2d 415 (1984). Since the Labor Department, through OSHA, has the primary responsibility for designing and administering such programs, your questions should be directed to them.

The Office of Management and Budget advises that they have no objection to the submission of these responses from the standpoint of the Administration's program.

Sincerely,

B. Wayne Vance
Deputy Assistant Attorney General

Enclosures (2)

The British Secretary of State for Foreign Affairs to the American Ambassador

FOREIGN OFFICE, S.W. 1.
No. U 954/301/71 *30th April, 1943.*

YOUR EXCELLENCY,

On the 6th January negotiations between the Ministry of Supply of the United Kingdom and the Board of Economic Warfare and the Metals Reserve Company of the United States relative to the apportioning of supplies of African asbestos were brought to a conclusion by the signing on their behalf of a Memorandum of Understanding, a copy of which I have the honour to transmit to Your Excellency herewith.

2. In response to the desire which I understand is shared by the Government of the United States of America, that the arrangement should be formally adopted by the two Governments, I have the honour to inform you that the Government of the United Kingdom of Great Britain and Northern Ireland approve of the principles contained in the Memorandum of Understanding annexed hereto and are willing to give effect to the provisions thereof, subject only to the understanding that the expression "cessation of hostilities" in Article II of the annexed Memorandum means the date of the signing of the latest general armistice suspending general hostilities between the United Kingdom and the United States of America on the one hand and any of the Powers with which they are now at war on the other, or such later date as may be agreed between the two contracting Governments.

3. If the Government of the United States are likewise prepared to give effect to this arrangement on these terms, the present note and your reply to that effect will serve to place on record the understanding between the two Governments in this matter.

I have the honour to be, with the highest consideration,

Your Excellency's obedient Servant,

ANTHONY EDEN

His Excellency
The Honourable
JOHN G. WINANT,
etc., etc., etc.,
1, Grosvenor Square, W. 1.

[E.A.S. 332]

2

MEMORANDUM OF UNDERSTANDING

6TH JANUARY, 1943.

1. *Statement of Principle*

The Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland agree so to regulate the importation of African asbestos and take such other practicable steps as to apportion supplies in accordance with the following principles:—

(a) Where 1943 production is adequate supplies will be so apportioned as to enable each of the Governments to create, by 1st January, 1944, stocks (whether privately or publicly owned) of each grade of asbestos equivalent to one year's consumption.

(b) Where 1943 production of a particular kind of asbestos is inadequate to achieve this objective, the apportionment of available supplies shall be made with reference to the relative importance to the war production programmes of the respective Governments of the uses of that asbestos. It is agreed, therefore, that the requirements of H.M.G. in U.K. for supplies of blue M.S. and S. asbestos shall be given prior consideration and, conversely, that requirements of the U.S.G. for supplies of amosite shall be given prior consideration.

(c) Necessary requirements of the other friendly nations for raw African asbestos fibre (as stated in the Appendices) shall be met to the extent of available supplies.

(d) When, as a result of inadequate supplies, the requirements of either Government are not fully met in any grade, such Government may, at its option and in agreement with the other Government, secure equivalent quantities of other grades by way of replacement for its reserve, if there are available surpluses after essential war requirements have been met.

(e) Any surpluses of available 1943 supplies remaining after meeting the stock-pile objectives of U.S.G. and H.M.G. after meeting the necessary requirements of other nations and after providing for such additional quantities as may be secured by the respective Governments pursuant to sub-paragraph (d) above shall be apportioned between the U.S.G. and H.M.G. in U.K. in proportion to the estimated consumption in the U.S. and the U.K.

(f) Available supplies in 1944 and thereafter shall be apportioned between the U.S.G. and H.M.G. in U.K. in proportion to the estimated consumption in the U.S. and the U.K. after allowing for quantities in stock or estimated to be in stock at 31st December, 1943, and allowing for the necessary requirements of friendly nations.

(g) The nominal requirements of the U.S.G. for blue A and C asbestos shall be met in full in 1943.

(h) In apportioning the various types of chrysotile asbestos within any particular grade (as for example in apportioning quantities of C. and G.2, H.V.L.2. and V.R.A.2 consideration shall be given to the interchangeability of the grades in the U.K. and to the unfamiliarity of the U.S. manufacturing companies with grades other than C. and G. The U.S.G. will in 1943 use its best efforts to induce the manufacturers to run manufacturing tests to ascertain the interchangeability and usability of grades other than C. and G. The U.S.G. and H.M.G. will encourage the full interchange of technical information. Any limitation of the quantities of V.R.A. or H.V.L. grades which may be delivered to the U.S.A. in 1943 is agreed without prejudice to the producers' claim that these grades are fully interchangeable with the C. & G. grades.

2. *Apportionment of Supplies*

Appendix 1 sets forth the agreed apportionment of supplies between U.S.A., U.K., the Empire and neutral destinations. This apportionment has been calculated in accordance with the principles set forth in paragraph 1.

3. Insofar as the requirements of the U.K. for African asbestos have been stated on the assumption of the continuance as hitherto of Canadian supplies, the respective Governments agree that the apportionments are subject to review in the event that adequate supplies of Canadian fibre are not forthcoming.

4. *Assurances of Blue Production*

In view of the real shortage in supplies of blue M.S. and S. grades, all practicable steps will be taken to increase blue M.S. and S. production to levels adequate to provide for the current essential requirements of the U.S. and the U.K. and, if possible, to provide for minimum reserve stocks.

5. *Assurance of Chrysotile, (C. and G.) Production*

In view of the high importance attached by users for important war production to the C. and G.1 and 2 grades, the production of these grades will be closely watched and every effort made to secure maintenance of production at an adequate level.

6. *Exchange of Information*

(a) *Information Furnished by U.S.G.*

The U.S.G. undertakes to furnish to H.M.G. within 60 days after the end of each three months' period a statement, by grades, of the receipts, consumption and stocks of African asbestos in the United States and of afloats and sinkings. The first such statement shall be made as of 31st December, 1942.

(b) *Information Furnished by H.M.G.*

H.M.G. in U.K. undertakes to furnish to the U.S.G. within 60 days after the end of each three months' period a statement, by grades, of the receipts, consumption and stocks of African asbestos in the United Kingdom and of afloats and sinkings. The first such statements shall be made as of 31st December, 1942. Quarterly statements will also be furnished to the U.S.G. of mining production and African stocks of the African producers.

7. *Provision for Review of Apportionments*

Upon exchange of information as to receipts, consumption, stocks, afloats and sinkings, either Government may request a review of the apportionment in any grade of African asbestos, to bring the actual position into line with the principles set forth in paragraph 1.

8. *Appointment of Representatives*

The U.S.G. and H.M.G. in U.K. will appoint a representative each to recommend the re-apportionment outlined in paragraph 7 above, or to adjust difficulties of interpretation of this agreement which may arise from time to time.

9. *Agreements between Metals Reserve Company and Producing Companies*

H.M.G. in U.K. takes note of the agreements entered into between Metals Reserve Company on the one hand and Cape Asbestos Company and Raw Asbestos Distributors on the other dated 22nd December, 1942, and 18th December, 1942, respectively and finds them to be in accord with the spirit of this agreement. The U.S.G. undertakes to provide H.M.G. in U.K. with copies of such contracts and of any documents bearing on the interpretation or extension of those contracts.

10. *Provision for review by C.R.M.B.*

The terms of this Agreement are subject to any action which may be taken at any time by the C.R.M.B.

11. *Duration of Agreement*

Except by mutual consent, this agreement shall terminate nine months after the cessation of hostilities. The disposition of stocks remaining in the two countries shall be the subject of full and mutual discussion between U.S.G. and H.M.G. in U.K.

Wm. Stix Wasserman, on behalf of
Board of Economic Warfare
Metals Reserve Co.

Oliver S. Franks, on behalf of
The Ministry of Supply.

[APPENDIX A]

(i) Estimated production available in 1943 including stocks at mines
(ii) Allocations to U.K., U.S., and other destinations
(iii) Shortages; and surpluses available for allocation

Grade	Estimated production available in 1942			Required by U.K. and U.S. on basis at (a) below		Allocation					Shortages & Surpluses		
	Major Company	Other	Total	U.K.	U.S.	U.K.	U.S.	Empire	Neutrals (see (b))	Total	Surplus	U.K.	U.S.
C & G1	2, 869		2, 869	246	1, 231	246	1, 231	–	–	1, 477	1, 392		
C & G2 VRA 2 HVL 2	10, 858		10, 858	4, 721	6, 648	4, 399	6, 459	–	–	10, 858		322	189
C & G3 VRA 3 HVL 3	54, 649		54, 649	9, 097	16, 235	9, 097	16, 235	15, 195	9, 100	49, 627	5, 022		
C & G4 VRA 4 HVL 3xx	19, 020		19, 020	3, 403	5, 733	3, 403	5, 733	3, 275	540	12, 951	6, 069		
Blue MS & S	5, 250	3, 000	8, 250	4, 990	9, 074	2, 050	3, 200	–	–	5, 250			
						1, 690	1, 310			3, 000		1, 250	4, 564
Amosite all grades	25, 100	5, 000	30, 100	7, 305	25, 820	3, 530	20, 820	750	–	30, 100		3, 775	–
							5, 000						
											12, 483	5, 347	4, 753
												12, 100	

(a) Total required to leave 12 months' stock in hand on 31.12.43 and provide a 10% margin for sinkings.

(b)

Grade	South America	Spain	Portugal	Sweden	Total
C & G3	2, 000	5, 000	1, 600	500	9, 100
C & G4	540	–	–	–	540

APPENDIX B.

Allocation of Surpluses shown in Appendix A

Grade	Surplus available for allocation	Allocation						
		To meet shortage of			Additional surplus divided equally		Total	
		Grade	U.K.	U.S.	U.K.	U.S.	To U.K.	To U.S.
C & G1	1, 392	C & G2	322	189	440	441	762	630
C & G3	5, 022	Blue and	2, 511	2, 511	–	–	2, 511	2, 511
C & G4	6, 069	Amosite	3, 034	3, 035			3, 034	3, 035
							6, 307	6, 176
							12, 483	

APPENDIX C

Total Allocations as in Appendices A and B

Grade	U.K.	U.S.	Empire	Neutrals				Total
				South America	Spain	Portugal	Sweden	
C & G1	1, 008	1, 861	–	–	–	–	–	2, 869
C & G2 VRA 2 HVL 2	4, 399	6, 459	–	–	–	–	–	10, 858
C & G3 VRA 3 HVL 3	11, 608	18, 746	15, 195	2, 000	3, 000	1, 600	500	54, 649
C & G4 VRA 4 HVL 3xx	6, 437	8, 768	3, 275	540	–	–	–	19, 020
Blue MS & S Amosite	3, 740	4, 510	–	–	–	–	–	8, 250
All Grades	3, 530	25, 820	750	–	–	–	–	30, 100

7

The American Ambassador to the British Secretary of State for Foreign Affairs

Embassy of the
United States of America
London, April 30, 1943

Your Excellency:

I thank you for your note of today's date relative to the apportioning of supplies of African asbestos, with which you transmitted a copy of a memorandum of understanding signed on January 6 last by representatives of the Ministry of Supply of the United Kingdom and the Board of Economic Warfare and the Metals Reserve Company of the United States.

In view of your assurance that the Government of the United Kingdom of Great Britain and Northern Ireland approves of the principles contained in the memorandum of understanding annexed to your letter, I have the honor to inform Your Excellency that the Government of the United States of America likewise approves of those principles and is willing to give effect to the provisions thereof. I also have the honor to inform Your Excellency that the Government of the United States of America concurs with your interpretation of the expression "cessation of hostilities" in Article II of the memorandum of understanding.

Accept, Sir, the renewed assurance of my highest consideration.

John G. Winant
American Ambassador

The Right Honorable
Anthony Eden, M.C., M.P.,
Secretary of State for Foreign Affairs,
Foreign Office, London.

DEPARTMENT OF STATE
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Claims Facility Agreement

INSURERS, MANUFACTURERS PROPOSE FACILITY TO HANDLE CLAIMS OUT OF COURT

The long-awaited agreement between asbestos manufacturers and their insurance companies to set up a non-profit Asbestos Claims Facility was made public yesterday at a hearing on the consolidated asbestos insurance cases in San Francisco Superior Court (See Enclosed Special Edition).

E. Judge Elderkin of Broebeck, Phleger & Harrison, representing Fibreboard, said the facility would have branches on the East Coast and West Coast, probably in San Francisco. Further branches would be set up if necessary, he said.

Elderkin said he was hopeful the agreement would end the insurance coverage litigation. He said it would help producers, because the insurers agreed to provide coverage and it would be helpful to claimants because it would cut costs.

However, David Steuber of Paul, Hastings, Janofski & Walker said neither GAF nor Nicolet were party to the Wellington Group discussions which led to the agreement and they are proceeding full speed with the coverage litigation and intend to have the matter tried in March of 1985.

Judge Ira Brown, who was not given a copy of the agreement before the hearing, said as far as he's concerned the trial date is still set for next March and the litigation will move forward. "I see no need for the court to alter anything at this point," he said.

Robert Venning of Heller, Ehrman, White & McAuliffe, representing Johns-Manville, said JM was not permitted to take part in the negotiations because of its Chapter 11 proceeding, but the company is eager to look at the agreement and will study it carefully.

Robert Saylor of Covington & Burling, representing Armstrong World Industries, said, "If all agree, it will succeed. If people don't agree, it will collapse."

Elderkin estimated it will take $4 million to $5 million to set up the facility and $10 million to get it running. Claimants would be asked to list the age, earnings, expected earnings and injuries. Each claim would be decided individually on its merits and insurers would defend non-meritorious claims vigorously.

Elderkin said the final settlement should be ready for signing by Sept. 13. He said a search is under way for a chief executive officer for the Asbestos Claims Facility. Hopefully the executive will be someone of the stature of Lee Iacocca, he said.

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Enc. 7

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SPECIAL EDITION

Asbestos Claims Facility

INSURERS, MANUFACTURERS PROPOSE AGREEMENT FOR ASBESTOS-RELATED CLAIMS

New York's Center for Public Recources (CPR) today released copies of an agreement between certain asbestos producers and their insurers to set up a non-profit Asbestos Claims Facility to settle asbestos cases out of court (See agreement, P. 8,358).

The agreement was reached by members of the Asbestos Claims Council after 19 months of negotiations under the auspices of the CPR Legal program. Those participating in the talks were Aetna Casualty & Insurance Co., Hartford Insurance Group, CIGNA Corp., Continental Insurance Co., Fireman's Fund Insurance Cos., Lloyds and the London Companies, Pittsburgh Corning Corp., Fibreboard Corp., Armstrong World Industries, Owens-Corning Fiberglas, Owens-Illinois Inc. and Celotex Corp.

The agreement sets forth formulas that explain how subscribing asbestos producers and insurers will pay Facility start-up costs and expenses and how liability payments to settle claims will be handled. The percentage of expenses and liability payments to be paid by each producer will be determined by each producer's percentage of the total outstanding claims and of that producer's average cost for closed claims. Subscribing insurers are to "acquiesce in and abide by the allocation of percentages of liability payments and allocated expenses to each Subscribing Producer." Initial startup costs for the Facility are estimated at $3.6 million.

The plan calls for all subscribing producers and insurers to withdraw their asbestos insurance suits "with prejudice and without delay." The subscribers also are to forego all claims against each other for bad faith or punitive damages. Subscribing insurers are to provide coverage to the producers and any disputed issues are to be resolved out of court through alternative dispute resolution.

The Facility will be organized by a board of directors and will be run by a chief executive officer. It will start operation with two regional offices, one on the East Coast and one on the West Coast.

Each asbestos-related claim will be handled on behalf of all the Facility's members, and claims will not be settled piecemeal or settled on behalf of some subscribers, but not on behalf of others. The Facility will not pay punitive damages. Any settling claimant will have to waive the right to seek punitive damages in the courts.

Continued

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Continued

"With respect to settlements, the Facility will be entitled to credit for any settlements made or judgments paid on behalf of any of its Producer members prior to the start-up of the Facility," the pact says. "With respect to claims that require defense in the tort system, the Facility will employ legal counsel to handle the joint defense of any such claims for all members. The Facility will have the right, but not the duty, to pursue other potentially liable non-members, including the United States Government. In evaluating or defending claims, the Facility will have the ability to utilize both inside an outside professional medical and other assistance and advice."

Claimants will fill out forms detailing their job, medical and compensation history. Eligibility of claims will be determined by whether the claimant was exposed to asbestos products of a Facility member and whether the claimant has an asbestos condition. The Facility will attempt to negotiate settlement of each claim and will have the right, in appropriate circumstances, to toll the running of the statutes of limitations.

"In the event a negotiated settlement cannot be obtained, the Facility will offer a full range of professional mediational procedures to promote non-judicial resolution of claims," the agreement says.

Each asbestos claim will be evaluated on its individual merits. The proceedings will be similar to court proceedings with both sides filing briefs, taking part in discovery and arguing their cases before a trial judge. However, the pact calls for the first party to limit its direct case to two days and for the second party to limit cross examination to one day. If either party is unhappy with the trial judge's decision an appeal may be made to a panel of three appellate judges.

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ASBESTOS CLAIMS FACILITY

ASBESTOS CLAIMS FACILITY

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AGREEMENT CONCERNING ASBESTOS-RELATED CLAIMS

This Agreement to provide for the administration, defense, payment and disposition of asbestos-related claims (hereinafter referred to as the "Agreement") is made between and among the undersigned Subscribing Producers, as hereinafter defined, and the undersigned Subscribing Insurers, as hereinafter defined.

WITNESSETH:

WHEREAS, Subscribing Producers and Subscribing Insurers have considered the nature of asbestos-related claims, their number and widespread distribution throughout the United States, the various rules of law governing their resolution, the scope and complexity of the insurance arrangements related thereto, and the burden that such claims have placed on the American civil justice system; and

WHEREAS, Subscribing Producers and Subscribing Insurers recognize the existence of numerous insurance coverage disputes between and among Insurers and Producers, differing court decisions, and the existence of cross-actions among Producers and among Insurers; and

WHEREAS, Subscribing Producers and Subscribing Insurers desire to simplify the procedures for handling claims, reduce the costs of such procedures, apply insurance arrangements in a consistent manner and take other steps reasonable and practical to ensure the expenditure of funds for the reasonable payment of meritorious claims at reasonable processing costs; and

WHEREAS, Subscribing Producers and Subscribing Insurers desire to resolve and discontinue the various disputes concerning insurance coverage for asbestos-related claims and to embark upon a method for resolution of asbestos-related claims and the insurance arrangements pertaining thereto;

NOW THEREFORE, in consideration of the mutual covenants herein contained and intending to be legally bound thereby, the undersigned Subscribing Producers and Subscribing Insurers hereby agree as follows:

I. GENERAL CONDITIONS

1. Any Producer or Insurer may become a signatory to the Agreement, and in so doing shall agree to be bound by the terms and conditions of the Agreement and the Appendices hereto, and shall offer participation in the Agreement to each and every of its Producers or Insurers, as the case may be.

2. The Agreement is intended to apply solely to asbestos-related claims, as defined hereinbelow. It is the product of informed negotiations among the signatories hereto, involving compromises of previously stated legal positions. The Agreement does not necessarily reflect the views of Subscribing Producers and Subscribing Insurers as to their rights and obligations with regard to matters or persons outside of the scope of the Agreement, and with respect to all such matters or persons, all subscribers reserve all previously held positions and all other rights and privileges.

3. The Agreement is intended to confer rights and benefits only upon Subscribing Producers and Subscribing Insurers, and is not intended to confer any rights or benefits upon persons not signatories to the Agreement. No person other than a signatory hereto shall have any legally enforceable rights under the Agreement. All rights of action for any breach of this Agreement by any signatory hereto are hereby reserved to Subscribing Producers and Subscribing Insurers.

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4. All actions taken and statements made by persons or their representatives relating to their participation in the Agreement, including its development and implementation, shall be without prejudice or value as precedents, and shall not be taken as a standard by which other matters may be judged.

5. All persons subscribing to or otherwise associating themselves with the Agreement request all Courts to take notice of its underlying purpose, and to accord all persons subscribing to or otherwise associating themselves with the Agreement and their representatives full privilege and protection with respect to the disclosure of their actions, statements, documents, papers and other materials relating to the Agreement, including its development and implementation.

II. ESTABLISHMENT OF FACILITY

1. Subscribing Insurers and Subscribing Producers shall establish a non-profit organization to be known as the Asbestos Claims Facility (hereinafter referred to as the "Facility"). The Facility shall administer and arrange for the evaluation, settlement, payment or defense of all asbestos-related claims against Subscribing Producers and Subscribing Insurers in accordance with the provisions of the Agreement and Appendix A hereto, and pursuant to the provisions of law and professional standards applicable to Subscribing Insurers.

2. The Facility shall be governed by a Board of Directors whose members shall number at least twelve and whose members shall contain an equal number of representatives of Subscribing Producer members and of Subscribing Insurer members. The Board of Directors shall have power to increase the number of directors and to add public directors, to appoint such officers, employees and committees of persons as the Board sees fit, to define their authorities and responsibilities and to set the conditions of their appointments. The Board of Directors shall have no power to modify any provisions of the Agreement and the Appendices hereto.

3. The Facility shall not sell, lease, exchange, mortgage, pledge, or otherwise dispose of all or substantially all of its property or assets and shall not dissolve or wind up its affairs except upon the affirmative vote of two-thirds of Subscribing Producer members with two-thirds interest or two-thirds of Subscribing Insurer members with two-thirds interest.

III. MEMBERSHIP IN FACILITY

1. Each Producer and each Insurer may become a signatory to the Agreement and in so doing shall agree to be bound by the terms and conditions of the Agreement and the Appendices hereto. Each Producer and each Insurer shall become a member of the Facility upon becoming a signatory to the Agreement and shall invite each of its Producers or Insurers, as the case may be, to become a signatory to the Agreement and thereby to become a member of the Facility.

2. Voting rights of members and voting procedures shall be determined respectively by Subscribing Producers and Subscribing Insurers.

3. Neither the Board of Directors nor any other persons shall have any authority to terminate the membership of a member without the consent of such member; *provided*, that membership in the Facility shall terminate at such time as a member no longer has an obligation to make payments or to pay expenses pursuant to the Agreement and the Appendices hereto. A member may terminate its membership in the Facility at any time upon written notice to the Facility, but, except as otherwise explicitly provided herein, termination of membership shall not modify the rights and obligations of a Subscribing Producer, Subscribing Insurer or the Facility under the Agreement and the Appendices hereto.

IV. SUBMISSION AND WITHDRAWAL OF CLAIMS

1. By becoming a signatory to the Agreement, each Subscribing Producer and each Subscribing Insurer designates the Facility as its sole agent to administer and arrange on its behalf for the evaluation, settlement, payment or defense of all asbestos-related claims against such Subscribing Producer or Subscribing Insurer. As sole agent, the Facility shall have exclusive authority and discretion to administer, evaluate, settle, pay or defend all asbestos-related claims. Except as otherwise provided in Paragraph 2 hereinbelow, the Facility shall serve perpetually as the sole agent of each Subscribing Producer and each Subscribing Insurer with respect to all asbestos-related claims.

2. Any Subscribing Producer or Subscribing Insurer may withdraw the designation of the Facility as its sole agent made pursuant to Paragraph 1 hereinabove, and may terminate the Facility's right and authority to act on behalf of such Subscribing Producer or Subscribing Insurer by providing written notice to the Facility 60 days prior to the effective date of such withdrawal; *provided*, that such withdrawal shall apply only to asbestos-related claims filed or made against the withdrawing Subscribing Producer or Subscribing Insurer subsequent to the effective date of withdrawal. The Facility shall continue to serve as sole agent for such Subscribing Producer or Subscribing Insurer with respect to all asbestos-related claims filed on or before the effective date of withdrawal.

V. COOPERATION WITH FACILITY

Each Subscribing Producer and each Subscribing Insurer shall comply with the terms and conditions of the Agreement and the Appendices hereto, and shall cooperate with and assist the Facility in furtherance of such terms and conditions. Each Subscribing Producer and each Subscribing Insurer shall respond fully and in a timely manner to reasonable requests by the Facility for information and shall assist in the securing and giving of evidence concerning asbestos-related claims. To the extent practicable, the Facility shall maintain the confidentiality of confidential or proprietary information submitted by Subscribing Producers and Subscribing Insurers.

VI. ALLOCATION OF LIABILITIES AND EXPENSES

1. Liability payments and allocated expenses shall be allocated to each Subscribing Producer on the date such Producer becomes a signatory to the Agreement. Such allocation shall establish the responsibility of each Subscribing Producer for a percentage of liability payments and a percentage of allocated expenses attributable to each claim handled by the Facility as sole agent for such Subscribing Producer under Section IV hereinabove. Each Subscribing Producer's percentage of liability payments and allocated expenses shall be established as provided in Appendix A-1 hereto, and shall be subject to modification only in the manner and to the extent set forth therein. To the extent that a Subscribing Producer's percentages of liability payments and allocated expenses attributable to a particular asbestos-related claim are not payable by one or more Subscribing Insurers pursuant to the Agreement and the Appendices hereto, such Subscribing Producer shall pay the percentages of liability payments and allocated expenses in question.

2. Each Subscribing Insurer shall acquiesce in and abide by the allocation of percentages of liability payments and allocated expenses to each Subscribing Producer, as described in Paragraph 1 hereinabove, and shall consider, recognize and hold each Subscribing Producer's

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shares of liability payments and allocated expenses attributable to each asbestos-related claim to be necessary, reasonable and proper and each Subscribing Producer to be properly bound and obligated to pay such sums. Each Subscribing Insurer shall pay a share of unallocated expenses and start-up costs as provided in Appendix A-2 hereto, which shall be subject to modification only in the manner and to the extent set forth therein.

VII. FACILITY CLAIMS HANDLING

1. Except as otherwise provided in Article II hereinabove, the Facility shall administer, evaluate, settle, pay or defend all asbestos-related claims against Subscribing Producers and Subscribing Insurers, either within the Facility's procedures or through standard judicial means. The Facility shall handle each asbestos-related claim on behalf of all Subscribing Producers and Subscribing Insurers, and shall not settle an asbestos-related claim on behalf of fewer than all Subscribing Producers and Subscribing Insurers. The Facility shall settle each asbestos-related claim so as to extinguish claims for all damages, including punitive damages, and, in the settlement of asbestos-related claims, the Facility shall not pay punitive damages to claimants.

2. The Facility shall have competent and experienced legal counsel to defend asbestos-related claims, and may use Facility employees and independent persons to provide professional medical and other assistance and advice.

3. Actions against nonsubscribing persons may be undertaken by the Facility on behalf of Subscribing Producers and Subscribing Insurers, but the Agreement shall neither require nor preclude such actions.

4. The Facility shall require valid evidence to support each claim against Subscribing Producers and Subscribing Insurers, and shall require credible medical evidence in each case prior to making payment to a claimant. Facility personnel shall be responsible for obtaining such evidence from each claimant and verifying it.

5. A claimant shall be paid solely for asbestos-related physical impairment and dysfunction. If such claimant subsequently develops an asbestos-related malignancy, the claimant may submit a subsequent claim. In addition, the Facility may provide certain claimants whose claims have not matured with an opportunity to resubmit a claim to the Facility should additional medical evidence become available. The Facility may enter into agreements to suspend the running of statutes of limitations with respect to claims timely presented and shall adopt uniform, streamlined, expeditious procedures, including voluntary nonjudicial means of resolving disputed claims.

6. Each asbestos-related claim shall be evaluated on its individual merits, but this shall not preclude two or more asbestos-related claims from being settled simultaneously.

7. The Facility shall not make payments pursuant to a pre-determined schedule of benefits, but detailed claims guidelines shall be used to evaluate and settle asbestos-related claims. The Facility shall make payments and settle claims only on behalf of Subscribing Producers and Subscribing Insurers and shall be entitled to credit for settlements made and judgments paid by Subscribing Producers and Subscribing Insurers prior to subscription to the Facility.

8. The Facility shall operate according to annual liability, defense and operational programs to be established by the Board of Directors. The Facility shall be subject to annual financial and quality control audits by persons selected by the Board of Directors and consisting of an equal number of representatives of Subscribing Producers and of Subscribing Insurers.

VIII. COVERAGE DISPUTES AND WAIVERS OF CLAIMS AND DEFENSES

1. Each Subscribing Producer and each Subscribing Insurer shall forgo all claims for declaratory relief or damages, as to other Subscribing Producers and Subscribing Insurers, relating to the application of insurance to the investigation, settlement, defense or indemnification of asbestos-related claims within the scope of the Agreement. Upon becoming a signatory to the Agreement, all such pending actions shall be dismissed and claims withdrawn, as to Subscribing Producers and Subscribing Insurers, with prejudice and without delay.

2. Each Subscribing Producer and each Subscribing Insurer shall forgo all claims for contribution or indemnity against other Subscribing Producers and Subscribing Insurers with respect to asbestos-related claims handled by the Facility on behalf of such Producer or Insurer.

3. Each Subscribing Producer and each Subscribing Insurer shall waive claims for bad faith or punitive damages, as to other Subscribing Producers and Subscribing Insurers, with respect to all matters within the scope of the Agreement; *provided*, that this waiver shall not apply to claims, including punitive damages for breach of or bad faith with respect to the Agreement.

4. This Section VIII shall not preclude a Subscribing Producer or Subscribing Insurer from seeking reimbursement under other provisions of the Agreement. In addition, there are a limited number of issues with respect to which the possibility of litigation is specifically provided for herein, but, except as otherwise provided in Paragraph 3 hereinabove, all claims for bad faith or punitive damages, as to other Subscribing Producers and Subscribing Insurers, shall be waived in such litigation.

5. Except as otherwise provided in Appendix B hereto, each Subscribing Insurer shall waive and permanently abandon and shall not assert or apply any conditions or defenses based upon, or exclusionary provisions contained in, insurance policies, which defenses or provisions have the effect of reducing or denying insurance coverage available under any of the insurance policies issued by Subscribing Insurers to Subscribing Producers. This waiver includes clauses in multiple insurance policies issued by the same insurer that seek to shift the entire loss arising out of one occurrence to one of the insurance policies or to reduce the amounts payable under one insurance policy with respect to the entire loss by amounts paid under any one of the other insurance policies.

6. Subscribing Producers and Subscribing Insurers shall resolve through alternative dispute resolution, in the manner set forth in Appendix C hereto, any disputed issues within the scope of the Agreement and the Appendices hereto.

IX. COVERAGE BLOCK AND FUNDING

1. The "coverage block," with respect to each Subscribing Producer, consists of all insurance policies issued to such Subscribing Producer by its Subscribing Insurers prior to the date (within the period January 1, 1973 through December 31, 1979) selected by the Producer and set forth in Appendix D hereto. In addition, insurance policies written to become effective prior to September 13, 1984, and subsequent to the ending date of a Subscribing Producer's initial coverage block may be added consecutively to such coverage block by payment, as due, of any applicable deductibles, retrospective rating plans or self-insured retentions in accordance with the provisions of Sections XV and XVI hereinbelow. Such insurance policies, when added, become part of the Producer's coverage block. Uninsured periods likewise may be consecutively added, and must be added if they fall between consecutively added insured periods; *provided*, that if a Producer adds a period for which it did not purchase insurance subsequent to the initial

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coverage block, such Producer shall make liability payments and pay allocated expenses for that period.

2. The "exposure period," with respect to each asbestos-related claim for a particular injury, is the period from a person's first exposure to any asbestos or asbestos-containing products until first diagnosis of such injury or death resulting from such injury, whichever occurs first.

3. Any insurance policies covering a part of the exposure period for a particular claim may be used to make liability payments and pay allocated expenses for such claim in accordance with the provisions of this Section, in the manner set forth in Sections X and XI hereinbelow.

4. An insurance policy of an insolvent Subscribing Insurer shall be treated as would any uninsured period in the initial coverage block; *provided*, that with respect to an insolvent London Company (exclusive of Lloyds syndicate members) that has underwritten a share within a particular insurance policy, the Subscribing Producer in question shall pay such insolvent Company's share of payments required under the insurance policy pursuant to the Agreement.

5. Insurance policies that expressly provide coverage on a specific manifestation or claims-made basis or first discovery trigger shall be included within the coverage block in a manner consistent with their terms.

X. LIABILITY PAYMENTS

With respect to a particular asbestos-related claim against a Subscribing Producer, liability payments attributable to such claim shall be made as provided hereinbelow:

1. Each primary insurance policy in the coverage block that covers any part of the exposure period shall make liability payments; and each excess insurance policy in the coverage block that covers any part of the exposure period not then covered by underlying primary or excess insurance in the coverage block also shall make liability payments; *provided*, that no insurance policy shall make liability payments after its limits of liability have been exhausted. Except as otherwise provided herein, whenever a Subscribing Producer has no insurance for a particular period within the coverage block, liability payments otherwise allocable to that period shall be allocated pursuant to Paragraph 2 hereinbelow to the periods within the coverage block for which the Subscribing Producer has insurance and to periods added to the coverage block for which the Subscribing Producer did not purchase insurance.

2. The amount of liability payments to be made by each insurance policy described in Paragraph 1 hereinabove shall bear the same relation to the aggregate liability payments incurred as the part of the exposure period then covered by such insurance policy bears to the total parts of the exposure period then covered by insurance policies in the coverage block and by periods added to the coverage block for which the Subscribing Producer did not purchase insurance; *provided*, that a Subscribing Producer shall make liability payments only if no part of the exposure period is then covered by insurance policies in the coverage block, except as otherwise provided herein.

XI. ALLOCATED EXPENSES

With respect to a particular asbestos-related claim against a Subscribing Producer, allocated expenses attributable to such claim shall be paid as provided hereinbelow:

1. Unless it expressly provides otherwise, each primary insurance policy in the coverage block that covers any part of the exposure period shall pay allocated expenses. Unless it expressly provides otherwise, each excess insurance policy in the coverage block that covers any part of the exposure period not covered by underlying primary or excess insurance in the coverage block also shall pay allocated expenses; *provided*, that such excess insurance policy shall only pay allocated expenses where: A) payment of allocated expenses would not apply against the aggregate limits of such excess insurance policy; or B) no primary insurance policies in the coverage block cover a part of the exposure period; or C) remaining primary insurance policies cover 10 percent or less of the period comprising the coverage block initially selected by the Subscribing Producer; or D) the initial coverage block is less than ten years and only one primary policy year remains within the coverage block. Except as otherwise provided herein, whenever a Subscribing Producer has no insurance paying allocated expenses for a particular period within the coverage block, allocated expenses otherwise allocable to that period shall be allocated to the periods within the coverage block for which the Subscribing Producer has insurance paying allocated expenses and to periods added to the coverage block for which the Subscribing Producer did not purchase insurance.

2. The amount of allocated expenses to be paid by each insurance policy paying allocated expenses pursuant to Paragraph 1 hereinabove shall bear the same relation to the aggregate allocated expenses incurred as the part of the exposure period covered by such insurance policy bears to the total parts of the exposure period covered by insurance policies in the coverage block paying allocated expenses and by periods added to the coverage block for which the Subscribing Producer did not purchase insurance; *provided*, that a Subscribing Producer shall pay allocated expenses only if no part of the exposure period is covered by insurance policies in the coverage block paying allocated expenses, except as otherwise provided herein.

3. The payment of allocated expenses shall not apply against the aggregate limits of primary insurance policies unless the insurance policies in question expressly provide otherwise. The payment of allocated expenses shall apply against the aggregate limits of excess insurance policies unless the policies in question expressly provide otherwise; *provided*, that with respect to excess insurance policies that expressly follow the provisions of underlying policies for the payment of allocated expenses, such underlying language shall apply except where it is inconsistent with the terms and conditions of the excess insurance policy.

XII. PAYMENT OF ALLOCATED AND UNALLOCATED EXPENSES FOLLOWING EXHAUSTION OF LIMITS

1. Each Subscribing Insurer, with respect both to policies of insurance that expressly provide that the duty to defend ceases upon exhaustion of aggregate limits (generally, post-1966 standard form policies) and to pre-1966 standard form policies, shall pay allocated and unallocated expenses until its limits of liability are exhausted but not thereafter.

2. As to Subscribing Producers whose asbestos-related claims are in the Facility, the Facility, on behalf of Subscribing Insurers that have issued pre-1966 standard form policies, shall provide a lifetime defense program, described in Appendix E hereto, to cover the allocated and unallocated expenses of all claims that under the Agreement would have triggered a pre-1966 standard form policy. The lifetime defense program shall respond, as would any insurance policy paying allocated expenses under the Agreement, to pay allocated and unallocated expenses for any claim triggering a pre-1966 standard form policy year where: A) there is no obligation in such policy year to pay allocated expenses for such claim; and B) no other insurance policies are

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paying allocated expenses for such claim or the payment of allocated expenses by any of the insurance policies paying allocated expenses for such claim applies against aggregate limits pursuant to Section XI hereinabove or the Subscribing Producer is paying allocated expenses for such claim.

XIII. START-UP COSTS OF FACILITY

1. All start-up costs shall be paid by Subscribing Primary Insurers in accordance with Appendix A-2.

2. Charter subscribers may mitigate the start-up expense burden through entrance fees that will be charged to new subscribers in accordance with Appendix A-2; *provided*, that new subscribers do not include Subscribing Producers, except in the case of a new Producer with no Subscribing Insurers.

XIV. OPERATING EXPENSES OF FACILITY

1. All operating expenses of the Facility shall be paid by Subscribing Primary Insurers and Subscribing Excess Insurers as they are called upon to make payments within the terms of the Agreement, as described more fully in Appendix A-2.

2. A Subscribing Insurer shall be relieved of the obligation to pay operating expenses upon the exhaustion of all of its obligations to pay liability payments and allocated expenses.

3. A Subscribing Producer shall be obligated to pay a share of Facility operating expenses only after all applicable insurance within the coverage block is exhausted.

XV. DEDUCTIBLES AND RETROSPECTIVE RATING PLANS

1. When a Subscribing Producer includes within its coverage block a particular period of insurance subject to a deductible, self-insured retention or retrospective rating plan under which payment would be due from such Subscribing Producer, that Subscribing Producer shall pay the deductible, self-insured retention or retrospective rating premium as due, except as otherwise provided herein.

2. A "date" shall be mutually agreed upon by each Subscribing Producer and its Subscribing Insurers for purposes of this Section XV and Sections XVI and XVII hereinbelow. The agreed-upon date may be the same as or different from the date unilaterally selected by the Subscribing Producer for the purpose of defining its coverage block pursuant to Section IX hereinabove. All insurance policies issued to a Subscribing Producer prior to the mutually agreed-upon date are "pre-date" insurance policies. All insurance policies issued to a Subscribing Producer subsequent to the mutually agreed-upon date are "post-date" insurance policies.

3. All deductibles and retentions, whether in pre-date or post-date insurance policies, shall be applied in a pro rata manner, to the same proportion as the policy year is called upon to make liability payments.

4. Once retrospective rating plans have been closed, whether prior to or following the date a person becomes a signatory to this Agreement, they shall not require any additional payments by a Subscribing Producer.

5. Unless otherwise explicitly provided in the insurance policy in question, payment by a Subscribing Producer of a deductible shall not reduce the aggregate limits of such insurance policy.

6. With respect to a primary insurance policy containing a clause or endorsement providing substantially that payments made which include a deductible amount shall not increase the Insurer's liability with respect to each occurrence and aggregate, once the Subscribing Producer and/or the Subscribing Primary Insurer have paid an amount equal to the aggregate limits, the Subscribing Producer shall pay no more on account of such deductible and the Subscribing Primary Insurer and Subscribing Excess Insurer shall resolve between themselves the responsibility for payments for such year.

XVI. APPLICATION OF INSURANCE POLICIES WITHOUT DEDUCTIBLE OR RETENTION LIMITS

A. Pre-Date Insurance Policies

1. Where deductibles and retentions are not limited explicitly by the insurance policy language, the following schedule of multipliers shall apply to limit such deductibles and retentions.

Face Amount of Deductible or Retention	Multiplier	Cumulative Maximum
Up to $5,000	10	$ 50,000
Next $20,000	7.5	$200,000

2. With respect to per claim deductibles in excess of $25,000, the maximum to be paid by a Subscribing Producer is the aggregate limit of the deductible-containing insurance policy. With respect to per occurrence deductibles in excess of $25,000, the affected parties shall resolve disagreements by negotiation, followed by non-binding alternative dispute resolution, followed, if necessary, by litigation. Any such resolution shall apply, in all respects, to the affected parties notwithstanding any other provisions of the Agreement.

3. Where a policy containing a deductible explicitly provides that payment of deductibles reduces aggregate limits, then payment of deductibles shall apply against aggregate limits, following the exhaustion of which, excess insurance policies shall become available. In all other cases involving deductibles, payment of deductibles shall not apply against aggregate limits, and excess insurance shall become available after the underlying insurance policy has paid its remaining limits.

B. Post-Date Insurance Policies

1. Deductibles and retentions shall apply as written. Affected parties shall resolve any disagreements by negotiation, followed by non-binding alternative dispute resolution, followed, if necessary, by litigation. Any such resolution shall apply, in all respects, to the affected parties notwithstanding any other provisions of the Agreement.

2. With respect to deductibles or retentions in an insurance policy underlying an excess insurance policy that contains standard excess ultimate net loss and/or loss payable clauses, such excess insurance policy shall respond when liability payments equivalent to the amount of the

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aggregate limits of the underlying insurance policy in question have been made by the Subscribing Producer or the Subscribing Insurer or both, unless:

(A) There is evidence that the Subscribing Excess Insurer was aware of the uncapped deductible or retention when writing its policy, such evidence to be in: (1) the schedule of insurance in the excess insurance policy; (2) the underwriting file of the Subscribing Excess Insurer; (3) the underwriter's placing slip; or (4) the underwriting file of the London broker (not any American broker); and

(B) Such evidence is provided to the Producer by the Excess Insurer within 60 days of the date that the excess insurance policy in question is listed in the Producer's Schedule of Insurance, and included in Appendix D hereto.

XVII. APPLICATION OF INSURANCE POLICIES WITHOUT AGGREGATE LIMITS

A. Pre-Date Insurance Policies

1. With respect to (A) primary products liability coverage written without aggregate limits either inadvertently or before the aggregate concept was developed, (B) primary non-products liability coverage written without aggregate limits at any time, and (C) to the coverage for any particular year the first excess occurrence policy without aggregate limits written directly above an insurance policy with aggregate limits, the following schedule of multipliers shall apply to provide aggregate limits for such policies:

Face Amount of Per Occurrence/Accident Limits	Multiplier	Cumulative Maximum
Up to $100,000	10	$1,000,000
Next $200,000	5	$2,000,000
Next $200,000	3	$2,600,000
Next $500,000	1.5	$3,350,000
Above $1,000,000	1	N/A

In addition, upon exhaustion of all applicable insurance policies for the year in question, the no-aggregate primary policy shall respond with coverage equal to ten times the per occurrence/accident limits up to the first $1 million of the per occurrence/accident limits, minus amounts previously applied to the maximum limit of such insurance policy.

2. All other primary products liability coverage written without aggregate limits shall apply as written. In the event of a dispute, affected parties shall engage in negotiation, followed by non-binding alternative dispute resolution, followed, if necessary, by litigation. Any such resolution shall apply, in all respects, to the affected parties notwithstanding any other provisions of the Agreement.

3. All other excess occurrence policies without aggregate limits shall apply to the extent of one per occurrence/accident limit.

B. Post-Date Insurance Policies

Post-date insurance policies without aggregate limits shall apply as written. In the event of a dispute, affected parties shall engage in negotiation, followed by non-binding alternative dispute resolution, followed, if necessary, by litigation. Any such resolution shall apply, in all respects, to the affected parties notwithstanding any other provisions of the Agreement.

XVIII. POLICY PERIODS OF OTHER THAN 12 MONTH MULTIPLES

1. Unless it expressly provides otherwise, an insurance policy of less than 12 months shall carry full aggregate limits for the term of such policy.

2. Absent agreement among the affected parties, unless the insurance policy or other documentary evidence explicitly provides that another result was intended:

(A) Where an insurance policy was extended prior to the expiration date for a period other than a multiple of 12 months: (1) if the extension was at the request of the Subscribing Producer, the period of less than 12 months shall carry pro rata limits; and (2) if the extension was at the request of the Subscribing Insurer, the period of less than 12 months shall carry full aggregate limits;

(B) Where an insurance policy was initially written for more than one year but not for a multiple of 12 months, then the period of less than 12 months also shall carry full aggregate limits; and

(C) Where an insurance policy was canceled prior to the expiration date by either the Subscribing Producer or Subscribing Insurer, then the period of less than 12 months shall carry full aggregate limits, except where a Subscribing Excess Insurer canceled its policy specifically to make its policies concurrent with underlying policies and the Subscribing Producer agreed, in which case the period of less than 12 months shall carry pro rata limits.

3. Deductibles and retentions in insurance policies described in this Section XVIII shall apply in a manner consistent with the application of limits hereunder.

XIX. RETROSPECTIVE AND PROSPECTIVE APPLICATION

1. Any and all provisions of the Agreement shall apply, as between a Subscribing Producer and Subscribing Insurer, to all liability payments and expenses incurred subsequent to the date on which both the Subscribing Producer and Subscribing Insurer became signatories to the Agreement, and with respect thereto and to the extent inconsistent herewith, shall nullify, repudiate, replace and supplant, as between such Subscribing Producer and Subscribing Insurer, any prior agreements or judicial determinations whether or not final; *provided*, that this Paragraph shall not apply to the extent that a Subscribing Insurer, prior to January 1, 1984, extinguished or exhausted an insurance coverage obligation by payments to a Subscribing Producer or affiliated company.

2. Subject to the provisions of this Section XIX each Subscribing Producer and each Subscribing Insurer shall be reimbursed for liability payments and allocated and unallocated expenses, including deductibles, retrospective premiums and loss conversion factors, incurred prior to the date on which the Subscribing Producer or Subscribing Insurer became a signatory to the Agreement, such reimbursement to be made in accordance with the Agreement and as if the Agreement were in effect at the time such payments and expenses actually were incurred; *provided*, that payments and expenses incurred pursuant to an agreement explicitly providing that such payments are final or to a final settlement agreement or final judicial determination that became effective prior to the date on which the Subscribing Producer or Subscribing Insurer became a signatory to the Agreement shall not be subject to reimbursement or reallocation.

3. Reimbursement of payments and expenses due hereunder shall be made within 60 days of the date the Subscribing Producer or Subscribing Insurer becomes a signatory to the Agreement. At the option of such Producer or Insurer, reimbursement of payments and expenses

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may be made quarterly in not more than twelve equal consecutive installments from the date payable under the Agreement, with interest upon any unpaid principal balances compounded daily and payable on a quarterly basis at the Rate of interest announced publicly by Citibank, N.A., in New York, New York from time to time as Citibank, N.A.'s base rate.

4. Reimbursement of payments and expenses shall be reallocated among primary and excess insurance policies; such reallocation to be made on a reasonable basis and in accordance with the Agreement.

5. With respect to fees and expenses incurred in asbestos insurance coverage litigation, each Subscribing Producer and each Subscribing Insurer, in the absence of agreement, may submit claims for such fees and expenses to alternative dispute resolution.

6. A Subscribing Producer shall not be reimbursed for allocated or unallocated expenses incurred in fulfilling its duty of assistance and cooperation under its insurance policies:

(A) In-house costs claimed by a Subscribing Producer to be in excess of those incurred in fulfilling its duty of assistance and cooperation under its policies, in the absence of agreement with its Subscribing Insurers, may be submitted to alternative dispute resolution; and

(B) Claims by a Subscribing Producer for fees and expenses incurred for coordinating counsel, in the absence of agreement with its Subscribing Insurers, may be submitted to alternative dispute resolution.

XX. MODIFICATION, TERM AND CHOICE OF LAW

1. The Agreement and Appendices A through E hereto is the entire agreement between and among Subscribing Producers and Subscribing Insurers for the administration, defense, payment and disposition of asbestos-related claims. All antecedent or contemporaneous extrinsic representations, warranties or collateral provisions concerning the negotiation and preparation of the Agreement and the Appendices hereto are intended to be discharged and nullified. In any dispute involving the Agreement and the Appendices hereto, no signatory shall introduce evidence of or seek to compel testimony concerning any oral or written communication made prior to September 13, 1984, with respect to the negotiation and preparation of the Agreement. Any modifications to the Agreement and Appendix B hereto may be made only by mutual agreement of all Subscribing Producers and Subscribing Insurers and in writing. Modifications to Appendices A, C, D and E may be made as provided therein.

2. All disputes concerning the validity, interpretation and application of the Agreement and the Appendices hereto, or any provision thereof, and all disputes concerning issues within the scope of the Agreement shall be determined in accordance with applicable common law of the states of the United States.

3. The Agreement shall have perpetual existence, notwithstanding the failure or invalidation of any particular provision in the Agreement and the Appendices hereto. Except as otherwise provided in the Agreement, neither termination of Facility membership nor withdrawal pursuant to Section IV hereinabove shall relieve a signatory to the Agreement of its rights and obligations hereunder, and each such signatory shall continue to abide and be bound by all of the terms and conditions of the Agreement and the Appendices hereto.

XXI. DEFINITIONS

As used in this Agreement and the Appendices hereto, the following terms shall have the following meanings:

1. *Allocated Expenses*—means all fees and expenses incurred for services performed outside the Facility that can be directly attributed to the defense and disposition of a particular asbestos-related claim.

2. *Asbestos-Related Claims*—means any claims or lawsuits against any Subscribing Producers, Subscribing Insurers and/or the Facility, by whomever brought and in whatever procedural posture such claims or lawsuits may arise, seeking monetary relief (whether or not such relief is the only relief sought) for bodily injury, sickness, disease or death, alleged to have been caused in whole or in part by any asbestos or asbestos-containing product; *provided*, that asbestos-related claims shall not include claims for damage to or destruction of property or statutory claims for compensation by an employee against an employer.

3. *Deductibles*—means, with respect to any insurance policy, that part of liability payments or, if the insurance policy so provides, that part of allocated expenses to be paid directly by the policyholder or reimbursed by the policyholder to the Insurer issuing such insurance policy.

4. *Insurers*—means persons that are or were engaged in the business of providing liability insurance to Producers. "Primary Insurers" means Insurers that have issued primary insurance policies to Producers. "Excess Insurers" means Insurers that have issued excess insurance policies to Producers.

5. *Liability Payments*—means the sums paid in settlement of, or in satisfaction of a judgment on, any asbestos-related claims, exclusive of allocated and unallocated expenses for such claims.

6. *Persons*—means natural persons and organizations of any kind.

7. *Pre-1966 Standard Form Insurance Policy*—means an insurance policy containing substantially the same defense-of-suits-clause as the pre-10/1/66 Insurance Services Office editions of the standard general liability policy.

8. *Producers*—means persons that are or were engaged in the mining, manufacturing, production, processing, fabrication, distribution, installation, sale or use of asbestos or asbestos-containing products or that may have a liability with respect to asbestos-related claims.

9. *Retrospective Rating Plans*—means rating plans that establish premiums based in whole or in part upon the policyholder's actual loss experience under the insurance policy.

10. *Self-Insured Retention*—means the amount that is to be paid or assumed by the policyholder and which amount must be exceeded before overlying insurance will respond for coverage.

11. *Start-Up Costs*—means those costs incurred by Insurers to establish the Facility, including funds used to purchase or lease Facility assets and to hire Facility personnel.

12. *Subscribing Insurers*—means Insurers that have become signatories to the Agreement.

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13. *Subscribing Producers*—means Producers that have become signatories to the Agreement.

14. *Unallocated Expenses*—means the overhead, operating and administrative expenses (other than allocated expenses) incurred in administering, defending and disposing of asbestos-related claims.

In Witness Whereof, each of the parties hereunto has caused this Agreement to be signed by its authorized representative on this 13th day of September, 1984.

Name: ____________________

For: ____________________

Name: ____________________

For: ____________________

Name: ____________________

For: ____________________

Signed, sealed and delivered this day of
19 , in the presence of

____
Witness to the signatures of the above named parties

ADDITIONAL SIGNATORIES

Each Subscribing Producer and each Subscribing Insurer that becomes a signatory to the Agreement subsequent to the 13th day of September, 1984, covenants and agrees to be bound in perpetuity by all of the provisions contained herein and in the Appendices hereto, and to the same extent as if such Subscribing Producer or Subscribing Insurer had been a signatory to the Agreement on said date.

Each person that, subsequent to the 13th day of September, 1984, pursues litigation other than as provided for under the Agreement against a Subscribing Producer or Subscribing Insurer concerning matters within the scope of the Agreement shall, upon becoming a signatory hereto:

A. reimburse each such Subscribing Producer or Subscribing Insurer for all attorneys' fees and costs incurred after September 13, 1984, in such litigation;

B. forgo any claims for attorneys' fees and costs incurred after September 13, 1984, in such litigation; and

C. reimburse each such Subscribing Producer or Subscribing Insurer for all damages (including punitive damages) assessed against such Subscribing Producer or Subscribing Insurer as a result of such litigation.

In Witness Whereof, each of the parties hereunto has caused this Agreement to be signed by its authorized representative on the dates indicated below.

Name: ____________________
Date

For: ____________________

Attest: ____________________
Date

Name: ____________________
Date

For: ____________________

Attest: ____________________
Date

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APPENDIX A-1

PRODUCER ALLOCATION FORMULAE

The liability payments and allocated expenses incurred by the Facility shall be allocated pursuant to the formulae set forth below. The formulae apply only to Subscribing Producers who had claims pending in the tort system as of September 30, 1983.

LIABILITY PAYMENTS

For open claims as of September 30, 1983, plus new claims reported to Subscribing Producers or the Facility for the period October 1, 1983, to one year after the opening date of the Facility, the allocation formula is as follows:

1. For each major state (determined presently to be Pennsylvania, California, Texas, Washington, Massachusetts, Maryland, Virginia, New Jersey, Mississippi and Connecticut)

(a) Determine the number of closed claims for each company as of September 30, 1983.

(b) Determine the amount of indemnity dollars, including punitive damages, *if any*, paid or owing for each company as of September 30, 1983.

(c) Divide each company's number of closed claims into its amount of indemnity paid or owing to arrive at an average cost per claim for each company.

(d) Determine the number of open claims for each company as of September 30, 1983.

(e) Multiply each company's number of open claims by each company's average cost per claim. This calculates each company's average cost times open claims.

2. For the remaining states the following procedure will be followed for each participating company.

(a) Add together the number of closed claims in all remaining states as of September 30, 1983.

(b) Add together the amount of indemnity paid or owing including punitive damages, *if any*, in all remaining states as of September 30, 1983.

(c) Divide each company's total number of closed claims into each company's total amount of indemnity paid or owing to arrive at each company's average cost per claim for states other than the major ones.

(d) Add together the number of open claims in the remaining states as of September 30, 1983.

(e) Multiply each company's number of open claims by its average cost per claim. This calculates each company's average cost times open claims for the remaining states.

3. Combining the major states and remaining states information.

(a) Add together each company's average cost times open claims (each company will have one amount for each major state and one amount for all remaining states).

(b) To determine each company's allocation percentage divide each company's average cost times open claims into the aggregate of all participating companies' average cost times open claims. An adjustment will be made for each company that had 20 or less closed claims in a state. For that company, its simple arithmetic nationwide average cost per claim (total closed claims—all states—divided into the total amount of indemnity—all states) is used as that state's average cost per closed claim.

ALLOCATED EXPENSES

Each company's allocated expense percentage shall be calculated by dividing its number of open claims as of September 30, 1983, by the aggregate of all open claims as of September 30, 1983, for all participating companies.

AUDIT

The data submitted by participating companies shall be reviewed for accuracy, consistency, reasonableness and completeness. A company shall no longer be bound to its allocation percentage if any necessary audit adjustments adversely affect that company's allocation percentage by more than 10 percent. However, if such shift results from the submission of incomplete or inaccurate data on the part of a company, that company shall be bound to its adjusted percentage.

PROSPECTIVE ADJUSTMENT

The validity of the foregoing as an ongoing program for future allocation shall be reviewed periodically, and changes for the future may be made, if appropriate, by Subscribing Producers.

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APPENDIX A-2
INSURER ALLOCATION FORMULAE
– Tentative Draft –

At this point in time it is not possible to have exact costing for the various types of funding that will be required for the startup and subsequent operation costs of the Facility. This draft paper reflects the best available information at this time.

1. Primary Objective

Fairness in allocation method or formula decided upon

2. Secondary Objective

A. Ease of administration

B. Attractiveness to prospective members, *i.e.* sales appeal

C. Long-term workability

3. Types of Funding

Funding will be divided into four main areas:

A. Funds required to build the necessary data processing system before the Facility becomes operative

B. Other funds (seed money) required to be expended before the Facility becomes operative

C. Funds required to ensure the operation of the Facility for the first two years

D. Funds required to ensure the ongoing operation of the Facility after the first two years and also to provide for the reimbursement of funds advanced by carriers with regard to 3B and 3C above

4. Method of Funding

As regards each area of funding required, a separate method is provided for. Also, because of various administrative problems encountered by the Lloyds and London companies (hereinafter referred to as the "London Market") as relates to allocations among their participants, separate provisions are set forth for the London Market participants with regard to seed money, nonreimbursable fees and initial assessments.

A. As regards the funds required after the signing of the contracts to build the data processing system:

(1) It is contemplated at this time that an initial funding not to exceed $100,000 will be necessary to carry the project through the user specification stage.

(2) It is also contemplated at this time that the data processing vendor thereafter will build the system and will operate same after the Facility becomes operative. It is contemplated that the Facility will enter into a likely seven year contract for these operations and that the monthly charges for paying for the cost of development plus operation of the system will be in the area of $70,000 to $90,000 per month. At this time, it is not possible to be more definite.

(3) It is contemplated in these funding arrangements that the operating costs of the system will be included in the regular operating costs of the Facility, but the expense of building the system will be considered to be a separate funding project so as to assure that the funds are always available to pay for the development of the system in the event some untoward event causes the Facility operations to terminate before the expiration of the seven year contract.

(4) For the purpose of our funding calculations, we will designate the development costs of the data processing system after the completion of the user specification period to be $3.6 million. This is an arbitrary amount at this time selected solely for planning purposes.

(5) Accordingly, to raise this amount of money:

(a) All subscribing carriers will be assessed a fixed amount in accordance with the schedule set forth below which is predicated upon the yearly average of the carriers' primary "other liability" premiums for the years 1955 to 1974 inclusive as reported in their annual statements (or as reported in their Schedule P filing). It is recognized at this time that for various reasons it may be difficult for carriers to furnish this information, and therefore as an alternative means of developing the assessment, the schedule may be predicated upon the yearly average of the carriers' primary "other liability" premium as reported for the ten most recent years in their annual statements (or as reported in their Schedule P filing). The final decision will be made by the Chief Financial Officer after the subscription period is concluded and after a poll of subscribing carriers to determine availability of the necessary data.

(b) This assessment is not reimbursable.

(c) The exact amount of said assessment is not determinable at this time since the final number of subscribers is not known.

(d) Any carrier that becomes a subscriber after the initial subscription period will pay a data processing assessment equal to two times the scheduled fee, and those monies will become part of the ongoing operating fund.

(e) Data processing costs incurred after the basic system comes on line and after the Facility becomes operative, whether they be for maintenance, system enhancements or for operating costs, will be considered as operating expense.

(f) Inasmuch as all or almost all of the data processing development cost will be incurred before the Facility becomes operative, those carriers which provided the seed money in a fashion as described hereafter in paragraph 4B will be *reimbursed* for any amounts expended in excess of the assessment schedule applicable to them.

(g) Based on an estimated cost of $3.6 million and on the following division of classes, the assessments for each class would be as follows:

Average yearly premium $0—$100MM—XX
Average yearly premium $101—$250MM—XXXX
Average yearly premium $251—plus—XXXXXX

This assessment will be made at the close of the subscription period.

B. As regards other seed money required to be expended before the Facility becomes operative:

(1) It should be noted that members of the Asbestos Claims Council have already incurred many thousands of dollars of expense, and this expense is considered to be part of

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seed money required and will be included as part of other pre-operation expenditures as being reimbursable. It is expected that prior to the close of the subscription period such expenses will continue to be incurred (e.g. Center for Public Resources charges, consultant fees and other similar expenses), and these expenses will continue to be paid by Council members as heretofore. These additional expenses will likewise be reimbursable (not by any Subscribing Producer).

(2) Prior to the close of the subscription period and the determination as to whether the plan is actually a viable one, further assessments for seed money for any purposes other than those set forth in (1) above will be made on an equal share basis against each non-London Market member of the Asbestos Claims Council. For identification purposes, such assessments may be for, but not limited to, salaries for proposed Facility employers, data processing contract costs, attorney fees for organization purposes, registration fees and the like.

(3) Immediately after it is determined that the number of subscriptions are sufficient so that the plan is a viable one, a nonreimbursable initial assessment fee of $XXXXX will be assessed against each and every non-Lloyds and London Company subscribing insurer. At this same time, a nonreimbursable initial assessment fee in the amount of $250,000 will be assessed as a total sum against all those subscribers represented by Lloyds and London Companies. All the monies collected by reason of these initial assessment fees are intended to cover expenses incurred between the end of the subscription period and before the beginning of operation.

(4) If there should be any monies remaining in this fund when the Facility operations begin, those monies will pass into the operating fund designed to cover the first two years of operation.

(5) Any insurer that subscribes to the Facility after the close of the initial subscription period will pay an initiation assessment of two times the initial assessment fee of charter subscribers, and that money will pass into the appropriate operating fund.

C. As regards funds required to ensure the operation of the Facility during the first two years and the funds required to ensure the operation of the Facility after the first two years and to provide for the reimbursement of funds advanced by carriers:

(1) A surcharge will be made against each insurer (or producer if their claims are handled by the Facility after the exhaustion of available coverage) for each of their claims as same is disposed of predicated upon (a) a percentage of indemnity paid and (b) a percentage of the allocated expenses paid. In no way or manner will the amounts of this surcharge in any way reduce or in any other manner impact the amount of indemnity coverage available to any insured.

(2) For the purposes of this surcharge, a claim will be considered to be a separate matter for each insurer (producer) for whom either an indemnity payment is made or an allocated expense is incurred or where both an indemnity payment is made and an allocated expense incurred for the same matter. For these purposes, the definition of indemnity payment and allocated expense is the common one used for insurance accounting purposes.

(3) The percentage of the surcharges may be different for indemnity and for allocated expense. By assessing a surcharge against indemnity, the problem which arises by reasons of insurers (or producers) making only indemnity payments at any one time is addressed. By assessing surcharges against allocated expense, the problem which arises by reason of the Facility successfully defending claims so that no indemnity need be paid is addressed in that these users also contribute. The underlying rationale is to assure that all users contribute to the cost of operating the Facility to the extent that the usage can be properly measured.

(4) The amount of the surcharge will be determined after studies are concluded as to the estimation of annual likely indemnity and allocated payments.

(5) An initial line of credit will be obtained on behalf of the Facility to ensure that sufficient funds are available for the initial stages of the operation.

(6) During the initial months of operation, the Comptroller will draw down from the line of credit that amount of money which is required as a difference between operating expenses and surcharges received to meet the obligations incurred by reason of operating expenses.

Also, during the first seven years of operation of the Facility, *the Comptroller* will draw down from the nonreimbursable data processing development fund (see 4B above) pro rata on a monthly basis, that amount of charge which, in the monthly payment to the vendor, refers to development costs. This will, of course, serve to reduce the overall monthly operating expenses and mitigate the amount of the surcharge.

(7) As the Facility operations mature, there will come a time when the monthly surcharges collected will exceed the total monthly operating expenses. Those excess funds will now be applied first toward reinstating the full amount of the line of credit and thereafter toward reimbursing in equal shares those carriers who advanced seed money during the presubscription period and the time between the end of the subscription period and the beginning of Facility operation.

(8) At the time the line of credit becomes fully reimbursed, it will be reduced to an amount felt to be necessary and proper by the Comptroller to ensure against monthly shortfalls in surcharges collected.

(9) Surcharges will continue to be levied in the same manner until the Comptroller has acquired a fund of money that will be sufficient to ensure the continued operation of the Facility for a period of at least two years forward. At any time during this period, the Comptroller may recommend the discontinuation of the line of credit.

(10) At that point in time, the Comptroller will reevaluate the surcharge schedule and recommend to the Board of Directors a schedule that will continue the level of available operating funds at a level which will ensure two future years of operation.

(11) Thereafter for the purposes of timing, an evaluation of the funding etc. will be made twice each year, e.g. as of June 30 and December 30. At that time, the Comptroller will report and make recommendations to the Board of Directors. The Board will then direct the necessary action.

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APPENDIX B

CONDITIONS, DEFENSES AND EXCLUSIONS RESERVED BY SUBSCRIBING INSURERS

Subscribing Insurers reserve the right to raise only the following conditions, defenses or exclusions pursuant to Paragraph 5 of Section VIII of the Agreement and Subscribing Producers reserve the right to contest same; disputes concerning such matters shall be resolved pursuant to Paragraph 6 of Section VIII of the Agreement:

1. That particular insurance policies were never issued or were canceled; *provided*, that a Subscribing Insurer that disputes the existence of an applicable insurance policy or part thereof notifies the affected Subscribing Producer at least 30 days prior to September 13, 1984, of its intention to assert such a defense and identifies the policy or policies involved.

2. That, with respect solely to matters occurring subsequent to September 13, 1984:

(a) the Subscribing Producer misrepresented or failed to disclose information material to an underwriter's issuance of an insurance policy, including information on the declarations page; or

(b) the Subscribing Producer breached its duties under an insurance policy, in the event of an occurrence, claim or suit, to give notice and to assist and cooperate; *provided*, that notice to and cooperation with the Facility shall be deemed to satisfy these duties.

3. That, with respect solely to matters occurring subsequent to September 13, 1984, or matters that were the subject of a dispute between an Insurer and Producer prior to May 1, 1984, the Subscribing Producer failed to pay insurance policy premiums.

4. That insurance coverage is not available or is affected by exhaustion of applicable limits of liability, the existence or non-existence of a defense obligation in an insurance policy or the obligation to provide supplementary defense payments; *provided*, that nothing contained herein shall be deemed to modify Sections XI, XII or XVII of the Agreement.

5. That the Subscribing Producer failed to permit inspection and audit for retrospective premium purposes for a period of three (3) years after the ending date of the insurance policy period.

6. That, subsequent to May 1, 1984, a Subscribing Producer prejudiced the subrogation rights of a Subscribing Insurer or assigned an interest in an insurance policy without the approval of the Insurer.

7. That coverage under an insurance policy is not available due to express exclusions for claims otherwise recoverable under automobile insurance, claims for statutory worker's compensation benefits or claims otherwise recoverable under worker's compensation or employer's liability insurance.

8. That coverage under an insurance policy is not available due to express exclusions for claims involving particular territories, particular operations of the insured, particular locations, particular products or particular diseases.

9. That any changes in any insurance policies must have been made in writing pursuant to policy terms in order to be effective.

APPENDIX C

ALTERNATIVE DISPUTE RESOLUTION

INTRODUCTION

Alternative Dispute Resolution ("ADR") is the method for resolving disputed issues as provided in the Agreement. ADR involves three basic stages: 1) good-faith negotiation; 2) a proceeding concluding with a binding decision if litigation is not allowed and a non-binding decision if litigation is allowed (the "Proceeding"); and 3) an appellate process for the binding decision.

At the negotiation stage, a person (the "Neutral") will be selected who will be empowered to employ a full range of informal, mediational techniques with Principals present. After the Proceeding there will be a final settlement conference with the Judge and/or the Neutral as a last attempt to reach a Party-fashioned solution. This is to be followed by a binding decision or litigation if litigation is allowed. The binding decision may be appealed to a panel of three Judges.

Before and during formal initiation of the ADR Procedure, all Parties are strongly encouraged to engage freely in any informal negotiation desired with the express goal of reaching a negotiated solution.

OBJECTIVES

1. TO ENCOURAGE A NEGOTIATED RESULT RATHER THAN USE OF ADR.
2. TO MAXIMIZE OPTIONS FOR PRAGMATIC SOLUTIONS.
3. TO BE COST-EFFECTIVE.
4. TO BE SPEEDY.
5. TO BE EFFICIENT.
6. TO BE FAIR.
7. TO ENCOURAGE CONSISTENCY OF INTERPRETATION.

DEFINITIONS

1. **Days**—Business days.
2. **Party**—When there are more than two Parties involved in a dispute, the use of the word Party in this document shall be interpreted to mean all Parties on a side. Thus, for example, joint Parties must exercise strikes collectively.
3. **Principal**—An individual with settling authority for a Subscriber.
4. **Subscribers**—Subscribing Producers and Subscribing Insurers.

THE NEGOTIATION

1.00 **Negotiation Procedure**
1 1.1 A Party or Parties notify the ADR branch of the Asbestos Claims Facility* ("Facility") of the dispute and request ADR.
2 1.2 Case is docketed by the Facility.

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* The Facility is more particularly described in Sections II through VII of the Agreement. A Procedure Manual is attached hereto as Exhibit I. ADR can be modified by unanimous agreement of the Parties, the Trial Judge, and the Facility. The Parties may apply to the Trial Judge for modification of the Procedure on a showing of good cause.

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2.00 **Aggregation of Issues Between Disputing Parties**

2.1 Issues may be aggregated only by agreement of all Parties.

3.00 **Good Faith Negotiation**

3.1 The Facility shall maintain a Panel of Neutrals who have been approved by the Initial Subscribers. These Neutrals will be qualified and prepared to apply the full range of informal mediational processes and techniques. An initial Panel of Neutrals is attached hereto as Exhibit 2.

3 3.2 If the Parties can agree on 1 or more Neutrals selected from the Panel, they will notify the Facility of the name or names selected. If the Parties cannot agree, the Facility will notify the Parties of a list of 7 available Neutrals.

5 3.3 The Parties will notify the Facility of 3 mutually acceptable Neutrals. Each Party may strike 2 names from the list provided by the Facility; the initiating Party strikes first by telephone.

7 3.4 The Facility will notify the Parties of the name of the Neutral and the time and the place of the first meeting. There shall be no *ex parte* communications with the Neutral.

9-to completion 3.5 Good faith negotiation shall be held with the Principals and the Neutral present. Good faith negotiations require that the Parties make good faith offers and/or demands. The Parties and the Neutral should undertake to develop all options for resolution and prepare:

3.51 A statement of issues.

3.52 A statement of desired results.

3.53 An exchange of key documents, testimony, and other relevant information.

3.54 A statement of offers.

3.6 If, in the judgment of the Neutral, good faith negotiations have taken place and the Parties cannot achieve resolution, either Party may initiate the Proceeding. If the Parties feel that good faith negotiations have taken place and the Neutral does not agree, the Parties may initiate the Proceeding. If one Party believes that good faith negotiations have taken place, but the other Party and the Neutral disagree, the Parties shall proceed as set forth in the Procedure Manual.

THE PROCEEDING

4.00 **Initiation of the Proceeding**

1 4.1 The Parties notify the Facility of the request for the Proceeding.

2 4.2 The Facility notifies all Subscribers of the request for the Proceeding.

3-10 4.3 New Parties may be joined at this point if all existing Parties agree. A written consent by all Parties to such joinder must be filed with the Facility no later than 7 days after notification by the Facility of the Proceeding.

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4.4 The Facility shall maintain a Panel of Trial Judges who have been approved by the Initial Subscribers. An initial Panel of Trial Judges is attached hereto as Exhibit 3.

11 4.5 If the Parties can agree on 1 or more Trial Judges from the Panel, they will notify the Facility of the name or names selected. If the Parties cannot agree, the Facility will notify the Parties of a List of 7 available Trial Judges. The list of Trial Judges shall not include the Neutral, and there shall be no communication between the Trial Judge and the Neutral.

13 4.6 The Parties shall notify the Facility of 3 mutually acceptable Trial Judges. Each Party may strike 2 names from the list provided by the Facility; the initiating Party strikes first by telephone.

15 4.7 The Facility shall notify the Parties of the name of the Trial Judge and the time and place of the first conference. There shall be no *ex parte* communications with the Trial Judge.

16 4.8 The Parties shall forward to the Trial Judge a joint statement of facts, issues, requested relief, and requests for documents not previously produced and other relevant information.

19 5.00 **Initial Conference.** Principals need not be present.

5.1 The Trial Judge shall review and clarify the statement of dispute, issues, requested relief, and status of settlement; confirm the trial date, place and schedule; and rule on any disputes relating to document production.

6.00 **Discovery**

24 6.1 Production of Documents. Parties will produce all requested documents not previously produced. The Trial Judge will be present during the production.

29-38 6.2 Depositions

6.21 No more than 5 days per side unless the Trial Judge rules otherwise. The Trial Judge has the discretion to rule otherwise in cases where there is a multiplicity of Parties or issues, or for good cause shown.

6.22 The Trial Judge will be present unless the Parties agree otherwise.

40 7.00 **Pre-Proceeding Conference.** The Principals and the Trial Judge must be present.

7.1 The Parties shall exchange and provide the Trial Judge (in writing) with:

a. Lists of witnesses and summaries of direct testimony related to issues to be proven.

b. Exhibits related to issues to be proven.

c. Trial briefs.

7.2 The Trial Judge shall resolve issues such as authenticity, admissibility, etc.

47-57 8.00 **Proceeding.** The case shall be presented to the Trial Judge and the Principals, who are required to be present.

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8.1 The first Party may put on its direct case for up to 2 days. The second Party may cross examine for up to 1 day. The Trial Judge may summarize the state of evidence.

8.2 The second Party may put on its direct case for up to 2 days. The first Party may cross examine for up to 1 day. The Trial Judge may summarize the state of evidence.

8.3 Each side may have up to ½ day for rebuttal.

8.4 Argument. The First Party may present direct argument for up to 1 hour. The Second Party may present rebuttal up to ½ hour. The Second Party may present direct argument for up to 1 hour. The First Party may present rebuttal argument for up to ½ hour. Questioning by the Trial Judge is allowed.

8.5 A record of the Proceeding shall be kept.

8.6 The Trial Judge has the discretion to alter the length of the Proceeding in cases where there is a multiplicity of Parties or issues, or for good cause shown.

58 9.00 **Final Settlement Conference**

9.1 The Trial Judge shall meet with the Principals. If all the Parties agree, the Trial Judge may:

a. Discuss the strengths and weaknesses of each Party's case;

b. Question the Parties in an effort to conciliate; and

c. Engage in mediation, as the Trial Judge sees fit.

60 10.A **Non-Binding Decision**, where the issue is one for which litigation is allowed.

10.A1 There will be no written opinion.

10.A2 An advisory opinion will be provided to any Party who requests it. The advisory opinion shall not be provided until 2 days after the Final Settlement Conference.

10.A3 Nothing from the ADR process is admissible in subsequent litigation.

10.A4 There will be a cooling off period of 1-2 days if the Trial Judge deems it advisable.

62 10.A5 A final negotiation session shall be held after the non-binding decision, with the Trial Judge and/or the original Neutral present, if all Parties agree.

10.A6 If settlement is not achieved at the final negotiation session, the Parties proceed to litigation.

72-79 10.B **Binding Decision**, where the issue is one for which litigation is not allowed. The Parties will have one week to file additional briefs or comments, and then the Trial Judge shall issue a written opinion and judgment within two weeks of the close of the Proceeding or the submission of additional papers, whichever is later. The opinion and judgment shall contain:

10.B1 Statement of relief granted.

Day

10.B2 Statement of costs, expenses and fees awarded to the prevailing party. Prejudgment interest shall be awarded as provided in the Agreement and the Procedure Manual.

10.B3 Findings of Fact and Conclusions of Law shall be issued.

10.B4 Petitions for rehearing may be filed but will not affect the time for appeal.

APPELLATE PROCESS

11.00 **Appeal**

1 11.1 No later than 10 days after the decision any Party desiring to appeal shall notify the Facility. The notice of appeal shall include a statement of the dispute, the requested relief, and the decision rendered below.

2 11.2 The Facility will docket the appeal and notify all Subscribers.

11.3 The Facility shall maintain a Panel of Appellate Judges who have been approved by the Initial Subscribers. An initial Panel of Appellate Judges is attached hereto as Exhibit 4.

3 11.4 If the Parties can agree on 3 or more Appellate Judges from the Panel, they will notify the Facility of the names selected. If the Parties cannot agree, the Facility will notify the Parties of a list of 9 available Appellate Judges. The list of Appellate Judges shall not include the Neutral or the Trial Judge, and there shall be no communications between the Appellate Judges and either the Neutral or the Trial Judge.

4 11.5 The Parties shall notify the Facility of 5 mutually acceptable Judges. Each Party may strike 2 names from the list provided by the Facility; the initiating Party strikes first by telephone.

6 11.6 The Facility shall notify the Parties of the 3 Appellate Judge Panel and the date of the appellate pre-argument conference which shall be held 3 days later.

9 12.00 **Appellate Pre-Argument Conference**

12.1 The Court shall review the issues on appeal and the relief requested.

12.2 The Court shall confirm that the appeal is in good faith and, if all the Parties agree, shall conduct settlement negotiations as to the issues on appeal.

12.3 The Court shall confirm the appeal schedule.

13.00 **Record On Appeal**

11 13.1 The Appellant shall file the record with the Facility.

13 13.2 The Appellee shall supplement the record if necessary.

14.00 **Briefs**

21 14.1 The Appellant's brief is due 10 days after the filing of the record.

41 14.2 The Appellee's brief is due 20 days after filing of the Appellant's brief.

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46 14.3 The Appellant's reply brief is due 5 days after filing of the Appellee's brief.

51 15.00 **Argument**

15.1 Appellant—45 Minutes.

15.2 Appellee—1 Hour.

15.3 Appellant—15 Minutes.

15.4 The Court may examine counsel either during the argument or after the argument is closed.

65 16.00 **Decision.** The Court shall issue a written opinion within two weeks of the close of the argument. The opinion shall contain:

16.1 Statement of relief granted.

16.2 Statement of costs, expenses and fees awarded to the prevailing Party. Prejudgment interest shall be awarded as provided in the Agreement and the Procedure Manual.

66 17.00 **Rehearing.** The procedure for Rehearing at the appellate level (and at the Proceeding) is provided in the Procedure Manual.

100.00 **Miscellaneous Provisions**

100.1 Amicus Curiae Briefs

a. Any Subscriber may file an amicus curiae brief as a matter of right at either the Proceeding or Appellate stage.

b. The Court may accord the brief whatever weight it deems appropriate.

100.2 The standard for reversal on appellate review is whether the decision is clearly erroneous. If all Parties request, the Trial Judge may help the Parties resolve their differences, and efforts by the Trial Judge in this regard are not subject to appeal.

100.3 All questions of law, including conflicts of law and burden of proof, will be resolved by the Trial Judge as provided in the Procedure Manual.

100.4 The Trial Judge and the Appellate Panel shall have the power to impose sanctions for failure to comply with any aspect of the ADR Procedure. Sanctions also may be imposed for frivolous appeals and frivolous petitions for rehearing. The sanctions may include costs, fees, and expenses; the relief requested by any Party; and any further monetary or other sanctions that the Trial Judge or the Appellate Panel deems appropriate. There will be a right of appeal with regard to any award of sanctions by the Trial Judge.

100.5 The Dispute Resolution Committee of the Facility shall provide guidance and instructions regarding the ADR Procedure and all problems relating thereto, with assistance from the General Counsel's office as necessary.

100.6 There will be no precedential effect of any decisions rendered in the ADR Procedure.

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100.7 All decisions in the ADR Procedure will be filed with the Facility but will be maintained by the Facility on a confidential basis and shall be available only to Subscribers.

100.8 The Federal Rules of Evidence will be applied by the Trial Judge unless modified by the Procedure Manual. Depositions and trial transcripts in prior actions automatically will be admissible, subject to whatever weight the Trial Judge determines to give such evidence.

100.9 The Facility will bear the costs of the ADR Procedure and the costs of the Neutrals until Initiation of the Proceeding (4.00). From then on, all costs will be paid by the losing Party. The procedure for payment of such costs is provided in the Procedure Manual.

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PROCEDURE MANUAL

[To Be Supplied]

EXHIBIT 1

PANEL OF NEUTRALS

It is anticipated that the panel of Neutrals will be drawn primarily from the CPR Judicial List which is in the process of being expanded from 30 to 100. However, all Neutrals shall be approved by the Initial Subscribers.

The criteria to be used to select a Neutral are as follows:

1. Neutral and unbiased toward any of the parties or the industries involved.
2. Distinguished and respected in the business or legal communities.
3. Available on a sustained basis and on reasonably short notice.
4. Experienced in the techniques of Alternative Dispute Resolution or willing and able to learn quickly.
5. Unquestioned integrity.
6. Experienced.
7. Creative.

EXHIBIT 2

PANEL OF TRIAL JUDGES

It is anticipated that the panel of Trial Judges will be drawn primarily from the CPR Judicial List which is in the process of being expanded from 30 to 100. However, all Trial Judges shall be approved by the Initial Subscribers.

The criteria to be used to select a Trial Judge are as follows:

1. Neutral and unbiased toward any of the parties or the industries involved.
2. Distinguished and respected in the business or legal communities.
3. Available on a sustained basis and on reasonably short notice.
4. Unquestioned integrity.
5. Creative.
6. Judicial experience at the trial court level.
7. Exhibits judicial temperament, that is the judge is:
    - a. Impartial
    - b. Patient
    - c. Courteous
    - d. Decisive
    - e. Fair
    - f. Effective

EXHIBIT 3

PANEL OF APPELLATE JUDGES

It is anticipated that the panel of Appellate Judges will be drawn primarily from the CPR Judicial List which is in the process of being expanded from 30 to 100. However, all Appellate Judges shall be approved by the Initial Subscribers.

The criteria to be used to select an Appellate Judge are as follows:

1. Neutral and unbiased toward any of the parties or the industries involved.
2. Distinguished and respected in the business or legal communities.
3. Available on a sustained basis and on reasonably short notice.
4. Unquestioned integrity.
5. Creative.
6. Judicial experience at the appellate court level.
7. Exhibits judicial temperament; that is the judge is:
   a. Impartial
   b. Patient
   c. Courteous
   d. Decisive
   e. Fair
   f. Effective

EXHIBIT 4

APPENDIX E
INSURANCE DEFENSE PROGRAM
(To Be Supplied)

Prior to September 13, 1984, an allocation formula will be provided by which Subscribing Insurers will fund the insurance defense program described in Paragraph 2 of Section VII of the Agreement. Said formula will be weighted to take into account the relative obligations of Subscribing Insurers to pay allocated expenses under the Agreement.

APPENDIX D
SCHEDULES OF INSURANCE
(To Be Supplied)

SUMMARY OF THE ASBESTOS CLAIMS FACILITY

The Asbestos Claims Facility (the "Facility"), organized and operated by Subscribing Insurers and Subscribing Producers, and managed by a Board of Directors containing an equal number of representatives of each, will be incorporated as a nonprofit corporation. Membership in the Facility will be open to all Insurers and Producers who subscribe to the Agreement Concerning Asbestos-Related Claims (the "Agreement"). All Facility members will have the obligation to cooperate with the Facility.

The Facility will have the authority to evaluate, settle, pay or defend all asbestos-related claims against all members. The Facility will also be responsible for liaison with non-members and for arranging for alternative dispute resolution procedures for disputes between members.

The Facility will be run by a Chief Executive Officer and will be adequately staffed by trained professionals. The Facility will start operation with two regional locations, one on the East Coast and one on the West Coast, plus a headquarters located at one of the regional locations.

The Facility will handle each asbestos-related claim on behalf of all of its members, and will not settle any claims piecemeal, nor will it settle on behalf of some and not all subscribing members. The Facility will not pay punitive damages in settlement nor will it settle any case in such a fashion as to leave open any punitive damages for resolution in the tort system. With respect to settlements, the Facility will be entitled to credit for any settlements made or judgments paid on behalf of any of its Producer members prior to the start-up of the Facility. With respect to claims that require defense in the tort system, the Facility will employ legal counsel to handle the joint defense of any such claims for all members. The Facility will have the right, but not the duty, to pursue other potentially liable non-members, including the United States Government. In evaluating or defending claims, the Facility will have the ability to utilize both inside and outside professional medical and other assistance and advice.

Liability payments and allocated expenses will be allocated to each Producer member. Such allocation will establish the responsibility of each Producer member for a percentage of liability payments and a percentage of allocated expenses attributable to each claim handled on its behalf by the Facility. Each Producer member's percentage of such payments and such expenses will be established as provided in Appendix A-1. Such percentages will be paid by Insurer members or Producer members, as the case may be, pursuant to the Agreement. Insurer members will pay start-up costs and unallocated expenses as provided in Appendix A-2.

Each claim submitted to the Facility will be submitted on forms provided by the Facility. In submitting a claim, a claimant will be required to submit certain standard information, including his job, medical and compensation history. The Facility first will evaluate the information

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member and whether the claimant has an asbestos condition, *i.e.*, radiographic changes or breathing abnormalities caused by exposure to asbestos. If the claimant is eligible for Facility treatment, the claim will be evaluated. The running of applicable statutes of limitations may be tolled during the period in which the Facility is handling a claim.

The Facility will attempt to negotiate settlement of each claim, by evaluating the existence and extent of asbestos-related physical impairment and dysfunction, and the liability, if any, of Facility members, including evaluation of applicable defenses and setoffs. The Facility will make payments only to claimants who have medical evidence of asbestos-related impairment and dysfunction. The Facility will have the right, in appropriate circumstances, to toll the running of applicable statutes of limitations for a claimant with an asbestos condition but no present impairment and dysfunction, which tolling will permit the claimant to return to the Facility if his claim matures. In the event a negotiated settlement cannot be obtained, the Facility will offer a full range of professional mediational procedures to promote non-judicial resolution of claims.

Among the goals of the Facility are: the encouragement and facilitation of negotiated settlements; the promotion of fair, consistent and timely resolutions of asbestos-related claims; the establishment of an efficient and cost-effective method of processing asbestos claims; the encouragement of resolution of disputes through non-judicial procedures; and the encouragement of waiver of punitive damage claims, at the earliest practicable time. These goals will be promoted, among other things, through a system of incentives and disincentives designed to encourage parties to reach negotiated results and to discourage use of the tort system, with all of its attendant delays, transactional costs and disruptive effect on the American civil justice system.

Like any large organization, the Facility will operate with Board-approved business plans and annual indemnity, defense and operational programs. The Facility will be subject to financial and quality control audits by Board-selected representatives, and its employees will be subject to traditional quality control review procedures.

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ASBESTOS CLAIMS FACILITY

APPENDIX B

CONDITIONS, DEFENSES AND EXCLUSIONS RESERVED BY SUBSCRIBING INSURERS

Subscribing Insurers reserve the right to raise only the following conditions, defenses or exclusions pursuant to Paragraph 5 of Section VIII of the Agreement and Subscribing Producers reserve the right to contest same; disputes concerning such matters shall be resolved pursuant to Paragraph 6 of Section VIII of the Agreement:

1. That particular insurance policies were never issued or were canceled; *provided*, that a Subscribing Insurer that disputes the existence of an applicable insurance policy or part thereof notifies the affected Subscribing Producer of its intention to assert such a defense. The notice required under this provision shall identify the policy or policies involved and shall be given within 30 days of the date that the insurance policy in question is listed in the Producer's Schedule of Insurance, and included in Appendix D hereto.

2. That, with respect solely to matters occurring subsequent to September 13, 1984:

(a) the Subscribing Producer misrepresented or failed to disclose information material to an underwriter's issuance of an insurance policy, including information on the declarations page; or

(b) the Subscribing Producer breached its duties under an insurance policy, in the event of an occurrence, claim or suit, to give notice and to assist and cooperate; *provided*, that notice to and cooperation with the Facility shall be deemed to satisfy these duties.

3. That, with respect solely to matters occurring subsequent to September 13, 1984, or matters that were the subject of a dispute between an Insurer and Producer prior to May 1, 1984, the Subscribing Producer failed to pay insurance policy premiums.

4. That insurance coverage is not available or is affected by exhaustion of applicable limits of liability, the existence or non-existence of a defense obligation in an insurance policy or the obligation to provide supplementary defense payments; *provided*, that nothing contained herein shall be deemed to modify Sections XI, XII or XVII of the Agreement.

5. That the Subscribing Producer failed to permit inspection and audit for retrospective premium purposes for a period of three (3) years after the ending date of the insurance policy period.

6. That, subsequent to May 1, 1984, a Subscribing Producer prejudiced the subrogation rights of a Subscribing Insurer or assigned an interest in an insurance policy without the approval of the Insurer.

7. That coverage under an insurance policy is not available due to express exclusions for claims otherwise recoverable under automobile insurance, claims for statutory worker's compensation benefits or claims otherwise recoverable under worker's compensation or employer's liability insurance.

8. That coverage under an insurance policy is not available due to express exclusions for claims involving particular territories, particular operations of the insured, particular locations, particular products or particular diseases.

9. That any changes in any insurance policies must have been made in writing pursuant to policy terms in order to be effective.

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10. That the insurance policy in question does not cover punitive damage awards due to an express exclusion or because the law of the state governing the insurability of punitive damages in the particular case holds that punitive damage awards are not covered by insurance because of public policy or contract interpretation; *provided*, that if such holding is by other than the highest court of the state in question, the Subscribing Producer and the Subscribing Insurer each shall pay 50 percent of the punitive damage award. Any disagreement as to whether punitive damage awards are covered by insurance shall be resolved by negotiation, followed by non-binding alternative dispute resolution, followed, if necessary, by litigation. Any such resolution shall apply, in all respects, to the affected parties notwithstanding any other provision of the Agreement.

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APPENDIX D
SCHEDULES OF INSURANCE

Following are guidelines to assist in the completion of the Schedules of Insurance pursuant to the provisions of the Agreement. All policies of insurance affording general liability, products liability or premises coverage should be scheduled hereunder:

1. Initial Coverage Block:	Set forth the closing date of the initial coverage block. For the definition of coverage block, see Section IX of the Agreement. All insurance policies covering the period prior to the closing date should be listed on Section 1 of Appendix D. All insurance policies covering the period subsequent to the closing date should be listed on Section 2 of Appendix D.
2. Pre-Date Insurance Policies and Post-Date Insurance Policies:	Set forth the date mutually agreed upon in accordance with Section XV of the Agreement. All pre-date insurance policies and all post-date insurance policies should be listed on the appropriate Sections of Appendix D.
3. Insurer:	Specify exactly as named in the insurance policy or other evidential document of coverage.
4. Policy Period:	Refer to the actual period for which the insurance policy is in effect. For policy periods of other than 12 month multiples, see Section XVIII of the Agreement.
5. Policy Type:	Specify whether primary, excess or self-insured.
6. Policy Form:	Enter the codes that describe the insurance policy form: A. Pre-1966 Standard Form Insurance Policy, as defined in Section XXI of the Agreement. B. The insurance policy does not pay allocated expenses following exhaustion of aggregate limits. See Section XII of the Agreement. C. The insurance policy does pay allocated expenses following exhaustion of aggregate limits. See Section XII of the Agreement. D. The insurance policy expressly provides coverage on a specific manifestation basis. E. The insurance policy expressly provides coverage on a claims-made basis. F. The insurance policy expressly provides coverage on a first discovery basis. G. The insurance policy pays allocated expenses and such expenses do not apply against aggregate limits. See Section XI of the Agreement.

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H. The insurance policy pays allocated expenses and such expenses apply against aggregate limits. See Section XI of the Agreement.

I. The insurance policy does not pay allocated expenses. See Section XI of the Agreement.

7. Per Occurrence/Accident Limits:

Refer to the limit for any one occurrence or any one accident.

8. Products Aggregate:

Refer to the aggregate limit applicable to products bodily injury liability coverage. Certain insurance policies may contain a combined aggregate for bodily injury, property damage and other covered perils; if so, refer to the combined limit.

With respect to insurance policies without aggregate limits, see Section XVII of the Agreement.

9. Products Aggregate Consumption:

The function of the Aggregate Consumption Summary is to track the consumption of total products liability aggregate limits by asbestos products bodily injury claims.

With respect to an insurance policy containing a deductible that explicitly provides that payment of deductibles reduces aggregate limits, see Section XV of the Agreement.

With respect to the payment of allocated expenses applying against aggregate limits, see Section XI of the Agreement.

10. Non-Products Coverage:

To impute aggregate limits for non-products coverage, see Section XVII of the Agreement.

11. Deductibles and Retentions:

Enter the codes that describe the deductible or retention:

J. Per occurrence deductible.

K. Per claim deductible.

L. Deductible reduces the aggregate limits of the insurance policy.

M. Self-insured retention.

N. Loss limit.

Where deductibles and retentions are not limited explicitly by the insurance policy language, see Section XVI of the Agreement.

Where an insurance policy containing a deductible explicitly provides that payment of deductibles reduces aggregate limits, see Section XV of the Agreement.

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APPENDIX D—SCHEDULES OF INSURANCE

Attaching to and forming a part of the Agreement Concerning Asbestos-Related Claims:

Subscribing Producer:* ____________________

Initial Coverage Block Ending: / / (date)

SECTION 1 (COVERAGE BLOCK):

A. Pre-Date Insurance Policies (pre- / /)

					Products Coverage				Non-Products Coverage				Retention			
Policy Period	Policy No.	Insurer**	Policy Type	Policy Form	Per Occurrence/Accident Limit	B.I. or Combined Aggregate	B.I. or Combined Aggregate Consumption	B.I. or Combined Aggregate Balance	Per Occurrence/Accident Limit	Aggregate	Aggregate Consumption	Aggregate Balance	Type	Amount	Stop Loss	Retro Balance

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* This includes all affiliated persons covered by the insurance policies listed herein.

** This includes all predecessor, successor and affiliated persons of each Insurer listed herein.

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APPENDIX D—SCHEDULES OF INSURANCE

Attaching to and forming a part of the Agreement Concerning Asbestos-Related Claims:

Subscribing Producer:* ______________________

Initial Coverage Block Ending: / / (date)

SECTION I (COVERAGE BLOCK):

B. Post-Date Insurance Policies (post- / /)

					Products Coverage				Non-Products Coverage				Retention			
Policy Period	Policy No.	Insurer**	Policy Type	Policy Form	Per Occurrence/Accident Limit	B.I. or Combined Aggregate	B.I. or Combined Aggregate Consumption	B.I. or Combined Aggregate Balance	Per Occurrence/Accident Limit	Aggregate	Aggregate Consumption	Aggregate Balance	Type	Amount	Stop Loss	Retention Balance

---

* This includes all affiliated persons covered by the insurance policies listed herein.

** This includes all predecessor, successor and affiliated persons of each Insurer listed herein.

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APPENDIX D—SCHEDULES OF INSURANCE

Attaching to and forming a part of the Agreement Concerning Asbestos-Related Claims:

Subscribing Producer:* ______________________

Initial Coverage Block Ending: ___/___/___ (date)

SECTION 1 (NON COVERAGE BLOCK):

A. Pre-Date Insurance Policies (pre- / /)

					Products Coverage				Non-Products Coverage				Retention			
Policy Period	Policy No.	Insurer**	Policy Type	Policy Form	Per Occurrence/Accident Limit	B.I. or Combined Aggregate	B.I. or Combined Aggregate Consumption	B.I. or Combined Aggregate Balance	Per Occurrence/Accident Limit	Aggregate	Aggregate Consumption	Aggregate Balance	Type	Amount	Stop Loss	Retro Balance

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* This includes all affiliated persons covered by the insurance policies listed herein.

** This includes all predecessor, successor and affiliated persons of each Insurer listed herein.

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APPENDIX D—SCHEDULES OF INSURANCE

Attaching to and forming a part of the Agreement Concerning Asbestos-Related Claims:

Subscribing Producer:* ____________________

Initial Coverage Block Ending: / / (date)

SECTION 3 (NON COVERAGE BLOCK):

B. Post-Date Insurance Policies (post- / /)

					Products Coverage				Non-Products Coverage				Retention			
Policy Period	Policy No.	Insurer**	Policy Type	Policy Form	Per Occurrence/Accident Limit	B.I. or Combined Aggregate	B.I. or Combined Aggregate Consumption	B.I. or Combined Aggregate Balance	Per Occurrence/Accident Limit	Aggregate	Aggregate Consumption	Aggregate Balance	Type	Amount	Stop Loss	Retro Balance

---

* This includes all affiliated persons covered by the insurance policies listed herein.

** This includes all predecessor, successor and affiliated persons of each Insurer listed herein.

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APPENDIX D—SCHEDULES OF INSURANCE
CERTIFICATION

The foregoing comprises the Schedule of all relevant policies of insurance known to the Subscribing Producer and to any Subscribing Insurer as of this date. Any relevant insurance policy subsequently discovered will be added to this Schedule by amendment or addendum, and it is agreed that all Subscribing Insurers are committed to cooperate with and assist the Subscribing Producer in the continuing search for policies of insurance.

This Schedule of Insurance is subject to the terms and conditions of the Agreement to which it is attached and forms a part thereof. The undersigned acknowledge and agree that such Schedule of Insurance is in compliance with Sections IX, XV, XVI and XVII of the Agreement, with particular reference to "Coverage Block", "mutually agreed upon date", "Pre-Date Insurance Policies" and "Post-Date Insurance Policies".

Dated:

Subscribing Producer: ______________________________

Subscribing Insurers: ______________________________

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NOV 5 1982

Results of Examinations of Asbestos Exposed Workers Filing for FECA Benefits

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Associate Professor of Epidemiology
School of Public Health
University of California, Los Angeles

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Appendix I

Summary

The objective of this project was to abstract and then analyze data from claims examinations of Long Beach Naval Shipyard workers who had been found to have radiologic evidence of asbestosis in a screening survey. A standard coding form was developed and all records from examinations performed at UCLA, Harbor General Hospital and Cedars-Sinai Hospital were abstracted. The data was analyzed first by examining the distributions of each variable individually. The variables were then examined two or three at a time using Stratification and RXC contingency tables. The summary measures of asbestos exposure were associated with the asbestosis related x-ray abnormalities and physical exam results but not with the pulmonary function tests. Smoking history associated strongly with pulmonary function test results but not with asbestosis related findings. Asbestos exposed workers could profit from anti-smoking educational programs. The associations identified in this data set are from a cross-sectional survey and should not be construed as necessarily representing cause and effect.

I. Background on Asbestos

An extensive review of the literature on asbestos and cancer was conducted by the National Cancer Institute and published in 1978 (1). A review of the pathophysiology of asbestosis was recently published in The New England Journal of Medicine (2). These were taken as the basic background for this study. Thus we have not conducted an additional review.

The major characteristics of asbestosis, which is the focus of this investigation, are:

1) symptoms of interstitial fibrosis including dyspnea on exertion, cough and chest pain;

2) decreased lung volume and flow rates and increased alveolar, arterial oxygen gradient;

3) x-ray abnormalities including signs of fibrosis, pleural plaques and pleural effusion;

4) cor pulmonale; and

5) physical exam findings including rales and clubbing of the fingers.

II. Background of this Project

A. The Survey

The following description of the survey is based on that published by Felton (3). The Long Beach Naval Shipyard, located just west of the city of Long Beach about 30 miles south of the city of Los Angeles. Charged with overhauling repairing and modifying Navy ships, the yard has been in continuous operation since 1943 except for a one-year closure in 1950. The repair work on an individual ship takes between 6 and 12 months and is shared between the civilian workers of the yard and the ship's crew. The trades involved are represented by 13 different craft unions. Approximately 7,500 federal civil service employees form the permanent shore-based work force.

Many of the craftsmen are prepared for their trades through a 4-year apprentice program conducted at the yard. Nearly, all of the production executives have risen through the ranks and have had essentially the same job exposures as the craftsmen currently working in the shipyard.

A preliminary study was conducted in June 1977. A 10% systematic sample of production workers (about 500) was selected from a roster of all craft personnel in the shops and on the waterfront. Posteroanterior (PA) views of the chest on all participants were taken on 14 x 17-inch film. Left and right anterior oblique views were taken if there was any question about the interpretation of the films. of the 500, 153 persons, or 30.5% had changes consistent with inhalation of free asbestos fibers. Most had pleural thickening although some exhibited pulmonary fibrosis as well. One previously undetected pulmonary carcinoma was discovered in this survey.

Because of the high percentage of positive findings, a subsequent survey of the remaining shipyard personnel was conducted in 1977.

This survey was carried out at the shipyard by the Naval Regional Medical Center Long Beach.

The screenings were completely voluntary. Of the 7,504 employees employed during 1977, ~~6640 or 88.6% completed the~~ study. An undetermined number declined to participate for various reasons. During 1977, 921 new employees came to the shipyard, and many retired. Thus, the 6640 individuals represent not only old employees but also new hire additions, and include women and white collar personnel. Of 6,872 male workers, 6,157 (89.6%) participated in the study while 483 of the 632 women employees (76.4%) participated.

Two certified "B" readers interpreted all of the films in accordance with the ILOU/C classification. For classification purposes and computer use, a diagnostic code was developed (2). Many of the items given numerical designations represented single diagnostic categories, whereas others indicate multiple diagnoses. All of the codes were separated into five main categories:

Group 1. Abnormal findings consistent with inhalation of asbestos fibers

Group 2. Normal

Group 3. Pulmonary fibrosis, nonspecific

Group 4. Questionable

Group 5. Other findings, not related to asbestosis.

The Results of the survey are shown in the following table from Felton (3):

CHEST X-RAY FINDINGS

Group	N	%	
1	1061	16.0	asbestos-related abnormal
2	4806	72.4	normal
3	140	2.1	pulmonary fibrosis
4	9	0.1	questionable
5	624	9.4	other abnormal
Total	6640	100	

Approximately 17% of the male employees were positive for asbestos-related chest x-ray changes. Less than 1% of the women showed comparable findings. Most of the women were white collar workers. Results from the screening indicated that 1201 workers had x-ray abnormalities possibly due to exposure to asbestos (ie. presence of one or more of the following: opacities, pleural thickening, plaques, calcifications, ill-defined diaphragm or cardiac outline, fibrosis, pleural effusion, interstitial markings or linear densities). Each of these workers was notified of the survey results and advised of the availability of referral examination centers for further evaluation.

B. The Referrals and Examinations

Beginning in 1979 approximately 1200 claims were eventually filed against the U.S. government for compensation for work in the LBNS (Long Beach Naval Shipyard), which may have led to asbestos related disease (about 20% of those screened and about 65% of those positive on screening). The remainder of those who had x-ray abnormalities either took no action or chose third party litigation exclusively. Most of the claimants who filed for government compensation also filed for third party litigation, although the third party litigation usually preceeded the filing for workman's compensation. This may have been done to prevent an adverse decision against the claimant by the government in the Workers Compensation claim from negatively affecting the claimant's third party litigation. Many who filed for third party litigation may have decided not to file for workman's compensation because they would have a lien put against their third party settlement for the workman's compensation settlement.

After a claim was filed, the claimant was assigned by the U.S. Department of Labor to one of three medical centers in Los Angeles County (Cedars-Sinai, Harbor General or UCLA). These three centers provided further testing of the claimants to determine whether or not they had asbestos related pulmonary disease, and if so, to what extent. Known (or diagnosed) cases of mesothelioma or lung cancer were excluded from further testing (and therefore not included in our study). The Labor Department initially assigned the claimants in equal numbers to all three centers, but as Cedars-Sinai exceeded it's capacity to handle more claimants, the remainder of the claimants were equally divided between Harbor General and UCLA. Of the compensation claims filed, about 450 went to Harbor General, 500 to UCLA and 275 to Cedars-Sinai (claims are still coming in). A total of 837 files were complete and available for this analysis.

Each center conducted an evaluative examination which was based on a recommended common protocol. However, since each center designed its own protocol which was then utilized by a variety of examiners, and since this was an evaluation exam for claims determination not a research protocol, the data was not collected in a truly standardized fashion.

Once the claimant was assigned to a hospital center, he was asked to fill out a questionnaire. A pulmonary nurse specialist or board certified Pulmonary Specialist then reviewed the questionnaire with the claimant to make sure he understood what was being asked and to clarify any ambiguous responses. Each center had its own version of the questionnaire based on a common protocol established by the Office of Workers Compensation Program (OWCP). The questionnaire elicited information about the following.

1. Occupational History: chronological summary of the individual's job history which includes a description of the frequency, degree, and duration of occupational exposures to asbestos with emphasis on exposure in Federal civilian employment. This history also included other dusts or toxins and any non-occupational exposure which might affect the pulmonary system.

2. Medical History: A chronological summary which included reference to any previous injuries or illnesses, pulmonary problems and the development of pulmonary symptoms, summary of pulmonary symptoms and a complete smoking history.

Each claimant then received a physical examination which included a description of the following:

1. General appearance and general health status

2. Sex, age, height, and weight

3. Presence or absence of cyanosis, clubbing, nicotine stains, edema, hepatomegaly, and exertional limitations

4. Results of cardiac examination including configuration, findings on percussion and auscultation and the presence or absence of basilar rales.

5. Chest X-rays interpreted by a board certified radiologist with confirmation of findings by the examining physician. (None of the radiologists were certified B readers.) A minimum of AP and lateral views were done. The report included comments on the quality of the film and description of all findings. This included a description of any abnormality or pathology present with particular attention to the presence of pulmonary hypertension, fibrosis or mesothelioma. The description of the pathology included:

a. Presence or absence of opacities described by type, size, shape, distribution and profusion;

b. Presence or absence of pleural thickening, plaques; or calcification with description of site and extent;

c. Presence or absence of ill-defined diaphragm or cardiac outline with description of extent.

X-rays were kept available for review on request.

6. Pulmonary Functions which included measurement of all of the following:

a. Forced vital capacity (FVC) and Forced Expiratory Volume in One Second (FEV1) measured in liters and representing the best of three efforts, and the FEV1/FVC Ratio (FEV1%) computed from these results. The report of the test included:

i. Date and time of the test;

ii. Name, file number, sex, race, age, weight, and height of the patient;

iii. The names of the technician performing and the physician supervising the test;

iv. A description of the patient's ability to understand and follow instructions and the degree of cooperation in performing the test;

v. The paper speed and the name of the instrument used;

vi. The date of last calibration of the instrument;

vii. Whether and why a bronchodilator was used and its impact on test results;

The report was accompanied by appropriately labelled spirometric tracings showing distance per second on the abscissa and distance per liter on the ordinate.

b. Carbon Monoxide Diffusing Capacity (Single Breath Method). The results were reported in cc/min/mmHg. The report of the test included estimated alveolar volume (based on measured FRC), the barometric pressure at the time of the test, the name of the technician performing the test, instrument used and the date of last calibration.

The report of the results of FVC, FEV1 and Diffusing Capacity included ACTUAL VALUES recorded, percent of predicted normal, and identification of the NORMAL STANDARD applied.

c. Arterial Blood Gas Study, administered AT REST. The report of the arterial blood gas study included the recorded values for pCO2, pO2, and pH collected simultaneously, the date and time of the test, the altitude and barometric pressure at which the test was conducted, the name of the technician and supervising physician, the pulse rate at the time the blood sample was drawn, the time elapsed between drawing and analysis of the sample and a statement indicating that the equipment was calibrated before and after each test.

7. Electrocardiogram results submitted with tracings.

8. Medical Impression and Opinion prepared by the examining physican, which included:

a. diagnosis of any pulmonary pathology;

b. diagnosis of any other disease condition present;

c. recommendations regarding indicated course of treatment if applicable; and

d. the degree of impairment and specific work limitations with emphasis on what the individual is able to do.

There were five examining physicians at UCLA, nine at Harbor General and three at Cedars-Sinai.

III. Data Collection Process

In consultation with pulmonary specialists at UCLA, Harbor General, and Cedars-Sinai, a list of possible manifestations of asbestos related disease was formed. The basic criteria for defining and classifying asbestos and other occupationally related exposures were provided by the U.S. Department of Labor's office of Workman's Compensation. All three centers obtained the information described above for each of its claimants, but the centers differed in how the information was presented in the claimant's file. An abstract guide and form (see Appendix I) were developed which standardized collection of the relevant information from the three centers. Questions 1-12 of the abstract form dealt with information on exposure to asbestos, non-asbestos occupationally related exposures and cigarette and pipe smoking (exposures which have the potential to confound the relationship between asbestos exposure and manifestations as a result of that exposure). Questions 13-23 concerned the possible manifestations of asbestos- related disease.

Information regarding the race of the claimant was included because there may be racial differences involved either in exposure to asbestos (or confounding exposures) or in its clinical manifestations. The categories of: White, Black, Hispanic, Japanese, Chinese and Other were used. Since Blacks, Whites and Orientals have different chest volume to body ratios, and since the chest volume to body ratio influences the pulmonary function test results, the race of the claimant must be taken into consideration when comparing the PFT's of the whole group of claimants. There was a potential for misclassification for the Hispanic group because the questionnaire from Cedars-Sinai did not differentiate Hispanics from other Whites, as did UCLA's and Harbor General's.

There were three sources for determining race; the claimant's declaration, the examining physican's classification and the classification by the technician performing the pulmonary function tesing. If there were discrepancies, a priority system was used in which the claimant's account took top priority, the examining physician's was number 2 and the PFT technician's account was the lowest priority. This system was also used when information on race from one of the three sources was missing.

The standardization of information on asbestos exposure was more complicated. There were two forms used to describe asbestos exposures. One form (A) was filled out by the employer, while the other form (B) was filled out by the claimant. Everyone in the study filled out form B while only about 25% had a completed form A. Thus, only form B was used in our analysis. Up to seven different exposures to asbestos for each claimant were recorded. Only one of the claimants reported more than seven exposures.

The first year exposed, the total length of the exposure and the reported frequency of that exposure were recorded for each different exposure. A different exposure was defined as either exposures that were not continuous, or that differed in frequency/duration or degree. If, however, two exposures occurred contiguously and their frequency/duration and degree matched, they were counted as one exposure.

For non-asbestos occupationally related exposures, the list from the UCLA questionnaire was used. This list included most of the exposures covered by Harbor General, and Cedar Sinai. Limited space resulted in recording only one of seven specified exposures per claimant, but the coding arrangement made provisions for indicating that there was an exposure not on the list and/or that there were two or more different exposures.

The medical history part of the questionnaire and the examining physician's report were checked to ascertain whether or not the claimant had dyspnea (and to what extent), dry cough, productive cough, chest tightness, wheezing and cardiac abnormalities. If there was a discrepancy between the two, the patient's account (except for dyspnea at rest, which needed a physician's confirmation), was used. This was done for consistency and because the pulmonary experts believe that while some of the symptoms may not appear during an examination, they may very well appear at other times.

The examining physician's report was also reviewed for findings of clubbing of fingers, cyanosis of skin or mucous membranes of the mouth and basilar rales.

The summary of the radiologist's report was used to ascertain whether or not the claimant had any of the following: pleural thickening, fibrosis, nodules (opacities), pleural plaques or calcifications, pleural effusion, ill-defined outline of the heart or diaphragm or an enlarged heart.

The actual values were recorded for the pulmonary function tests from the laboratory reports from Harbor General and Cedars-Sinai. However, since the UCLA prediction equation was used in determining the percent predicted values for the other two centers the percent predicted values from UCLA were directly recorded. The percent predicted was used as a means of at least partially removing the effects of differences in age, race or body build. Since only UCLA had hemoglobin values readily available, DcO values from the three centers were not comparable. Thus, only UCLA DcO values were collected for this analysis. Harbor General claimants sometimes came back for repeat PFT's a year after the initial set. In those cases we used the initial results.

Each of the claimants was assigned an identification number which contained an identifier for the center from which the claimant came and a personal identifier.

IV. Data Management and Analytic Approaches

The information obtained from the claimant's file was abstracted and coded for all 837 files by one research assistant. When the coding and abstracting were finished, the abstract forms were sent to a professional keypuncher. The cards were then read into a cardreader and the data was stored on magnetic tape.

After tape entry, the data was cleaned by running a frequency distribution on all variables. These distributions were then examined for outlying, missing and "impossible" values. These values were identified and checked to determined whether they were real, or the result of an error (abstracting, coding or keypunching).

Frequency distributions also provided a basis for determining which variables should be further analyzed separately or should be either dropped or combined with other variables. Some variables were transformed in a new data file.

All PFT's were converted to the percent predicted using the UCLA prediction equations to standardize them for all three centers. The equations used to derive the predicted value were:

A. $FVC = 58.27Hcm-25\ age-4251$

B. $FEV1=36.22Hcm-32age-1260$

C. $FEV1/FVC=-12.275Hm-0.2422age+107.12$

D. $TLC=9.409H(m)-0.015age-9.17$

E. $DcO=32.5(Hm)-0.20age-17.6$

For the FEV, FVC and TLC, the predicted values for blacks and orientals from the above equations were multiplied by 0.9 to obtain a more accurate prediction for these races. The observed value for each test was then divided by the predicted value and multiplied by 100 to get the percent predicted.

The arterial blood gases were treated in a similar way using the following equations:

$150-1.2xPaCO2-PaO2$ = actual gradient.

$150-1.2xPaCO2-(101-0.43xage)$ = expected gradient.

If the actual was less than or equal to the expected, the claimant's gradient was considered normal.

If the actual was greater than the expected, it was considered abnormal.

The smoking history was used to calculate pack-years of smoking for all current or former smokers (average number of packs per day smoked times the number of years).

The exposure information was used to create several summary variables. The lengths of time exposed for each exposure were summed to derive the total length of time exposed. The person was classified as "exposed to visible asbestos dust" if he reported ever being exposed to visible asbestos dust.

The frequency/duration data in the questionnaire was recorded as mild, moderate or severe. If all exposures were severe then the subject was classified as having a severe exposure. If all exposures were mild then the exposure was classed as mild. All other combinations were classed as moderate exposure. Another summary variable was created in an attempt to combine the severity and length of exposure into a single variable. The mild exposures were arbitrarily assigned a value of one, the moderate exposures a value of two and the severe exposures a value of three. For each exposure, the severity code was multiplied by the length of the exposure in years and this product summed for all exposures. Any subject with a severity code or length of exposure missing for any exposure was eliminated from this analysis. Thus, the sample size in this analysis was reduced.

The six categories of pleural thickening were collapsed into three categories (none, moderate/severe, other). The eight categories of the physical exam results were collapsed into three categories (no abnormalities, non-asbestos related and asbestos related abnormalities). The six categories of the x-ray results were similarly collaped into three categories (no abnormalities, non-asbestos related and asbestos related abnormalities). The year the claimant was first exposed was used to calculate the number of years since first exposure to asbestos by subtracting the year first exposed from the year of hospital examination. The age of the claimant when he was first exposed to asbestos was calculated by subtracting the years since first exposure from age of claimant.

Cutpoints were established for many of the variables in order to use analytic techniques for non-continuous variables. The cutpoints for classifying the pulmonary function tests as normal or abnormal were: FEV1<80%; TLC<80%, >120%; FVC<80%; DcO<75%; FEV1/FVC ratio < 0.70.

The cutpoints (15, 60) for the product of severity times length of exposure were determined by dividing that distribution into quarters. Age at first exposure was divided at age 25. The length of exposure was divided into thirds.

Two-by-two and R by C contingency tables were used along with stratification for most analyses. Linear regressions were done on the exposure product and length of exposure for the pulmonary function tests. Multivariate analysis on a limited set of variables (age, age at first exposure to asbestos, all exposure variables, smoking and non-asbestos occupational exposures) was performed for the asbestos related physical exam and x-ray abnormalities, pulmonary function results and productive cough. Discriminant function analysis was utilized to select the variables which were most important in separating the normal from abnormal exam groups. Those variables which entered the discriminant function and any remaining variables thought to still be potentially important were further tested in a logistic regression analysis. The primary goal of the analysis was to describe the population and the interrelation of the variables. Also the representativeness of the examined population and the standardization of procedures both within and between centers is in question. Thus, we have not generally reported statistical tests of significance.

V. Results

A. Univariate Distributions

Table 1 shows the distribution of all variables which were abstracted for this analysis. Harbor General Hospital had the highest percentage of referrals while Cedars-Sinai had the lowest. The age ranged from 25 to 80 with a mean of 56 years. The majority of subjects were white. There was a sizeable proportion also of Black and small numbers of other racial groups. The majority of workers reported exposure to asbestos dust at a level at which it was visible in the air. A majority of the asbestos workers also reported an occupational exposure to some other substance which might be expected to produce pulmonary effects. The majority of workers at one time or another were smokers. The majority of workers reported at least mild dyspnea. Seventy percent of the workers were found to have one or more physical exam findings and approximately 70% were found to have x-ray evidence of pleural thickening. About 20% of the subjects had fibrosis on chest x-ray (it is not clear how many of these were interstitial) and about 40% had one or more other x-ray abnormalities including pleural plaques, calcification, pleural effusion or enlarged heart.

A total of 48 workers (5.7%) reported a prior history of cancer. This figure cannot be compared to other published values since most of those with cancer had been excluded from these referrals. Most of these cancers were skin cancer but five were reported as lung cancer.

TABLE I
Univariate Distributions
All Collected Variables

VARIABLE	DISTRIBUTION			EXPLANATION
Exam Center	Number	Percent		
UCLA	275	32.8		
Harbor General	320	38.2		
Cedars-Sinai	242	29.0		
TOTAL	837	100.0		
Age (years)	Mean= 56	SD=9.1	Range=25-80	
Race	Number	Percent		
White	505	60.3		
Black	228	26.3		
Hispanic	53	6.3		
Oriental	10	1.2		
Other	32	3.8		
Unknown	17	2.1		
Height (cm)	Mean= 172	SD=7.3	Range=147-196	
Weight (kg)	Mean= 85	SD=27.8	Range=32-192	
Type of Exposure Information Form	Number	Percent		
Type A-form 5 or more exposures	1	0.1		Type A-company's account of asbestos exposure
Type B-form ≤4 exposures	456	54.5		Type B-Claimant's account of asbestos exposure
Type B-form ≥5 exposures	9	1.1		
Type A and Type B forms	345	41.2		
No form in chart	26	3.1		

(Page one of five)

Table 1
(Page two of five)

VARIABLE	DISTRIBUTION		EXPLANATION
Frequency/Duration of Asbestos Dust Exposure	Number	Percent	
Severe	211	25.2	Severity of asbestos exposure
Mixed	565	67.5	
Mild	31	3.7	
Not classified	30	3.6	
Degree of Exposure	Number	Percent	
Dust	597	71.3	all jobs had exposure to visible dust
No dust	55	6.6	no jobs had exposure to visible dust
Mixed	185	22.1	some jobs had exposure to visible dust
Total Length of Exposure (years)	Mean=22.6	SD=11.04	Range=2-80
Smoking Status	Number	Percent	
Non-smoker	184	21.9	
Former smoker	455	54.4	
Current smoker	198	23.7	
Usual Number of Cigarettes Smoked	Number	Percent	
Less than 5 per day	66	7.9	
5-10 per day	130	15.6	
11-15 per day	104	12.4	
16-20 per day	202	24.1	
21-30 per day	66	7.9	
Over 30 per day	78	9.3	
Not applicable (never smoked)	184	22.0	
Unknown	7	0.8	

Table 1
(Page three of five)

VARIABLE	DISTRIBUTION		EXPLANATION
Age Began Smoking (years)	Mean=38.4	SD=33.13	Range=10-53
Total Number of Years Smoked	Mean=42.2	SD=32.14	Range=1-65
Pipe/Cigar Smokers	Number	Percent	
Regular smokers	82	9.8	
Occasional smokers	112	13.4	
Never smoked	633	75.6	
Unknown	10	1.2	
Reported Dyspnea	Number	Percent	
Normal	212	25.3	
Mild	368	44.0	
Moderate	189	22.6	
Severe	66	7.9	
Unknown	2		
	Number	Percent	
Basilar Rales	93	11.3	
Wheezing	240	29.2	
Dry Cough	297	36.2	
Productive Cough	404	49.2	
Chest Tightness	121	14.7	
Clubbing	5	0.6	
Cianosis	1	0.19	

Table 1
(Page four of five)

VARIABLE	DISTRIBUTION		EXPLANATION
Physical Exam	Number	Percent	
Normal	239	28.6	
Nonasbestos-abnormality	433	51.7	
Asbestos related abnormality	149	17.8	
Not classified	16	1.9	
Xray Results	Number	Percent	
Normal	510	60.9	
Nonasbestos-abnormality	79	9.4	had one or more nonasbestosis related abnormalities
Asbestos related abnormality	234	28.0	had one or more asbestos related abnormalities
Not classified	14	1.7	
	Number	Percent	
Pleural Plaques	229	27.8	
Nodules (Opacities)	4	0.5	
Ill Defined Heart or Diaphragm	1	0.19	
Pleural Effusion	6	0.7	
Enlarged Heart	6	0.7	
Slightly Enlarged Heart	85	10.3	
Pleural Thickening	Number	Percent	
Normal	279	33.3	
Mild	261	31.2	
Moderate/severe	122	14.6	
Other	169	20.2	
Not classified	6	0.7	

Table 1
(Page five of five)

VARIABLE	DISTRIBUTION			EXPLANATION
Fibrosis	Number		Percent	
Normal	649		77.5	
Mild	170		20.3	
Moderate/severe	10		1.2	
Not classified	8		1.0	
Smoking History Classification	Number		Percent	
Light	176		21.9	0-9 pack-years
Heavy	469		56.0	10+ pack-years
Never	184		22.0	Never smoked
Not classified	8		1.0	
Reported Nonasbestos Occupational Exposures				
Yes	396		47.3	
Unknown	112		13.4	
Pulmonary Function Tests	Mean	S.D.	Maximum	Minimum
FEV1 (% predicted)	92.81	21.40	159.06	16.0
FVC (% predicted)	90.72	16.25	146.28	26.0
FEV1/FVC (ratio)	73.91	11.03	91.86	19.2
TLC (% predicted)	102.76	15.82	179.98	48.63
DcO (% predicted)	85.00	47.40	212.20	10.20
Alveolar-Arterial Oxygen Gradient (mmHg)	3.57	10.16	37.5	-41.07

B. Cross comparisons

Table 2 shows some of the population differences by examination center. There are a number of differences that should be noted in this table. There were relatively minor differences by age, race and smoking status. There were marked differences in reported dyspnea by center. Subjects seen at UCLA had a greater percentage of physical exam abnormalities. On the other hand, UCLA had a lower proportion of pleural thickening on x-ray and of asbestos-related x-ray abnormalities. There were also differences between centers in the reported non-asbestos occupational exposures. The total length of exposure and exposure product distributions were remarkably similar.

Table 3 shows the examination results by smoking status of the subjects. In this table the smoking is classified according to pack-years, whether or not the subject was a current smoker. The expected gradient of increasing frequency of abnormality of pulmonary function tests is seen with smoking history. This is most striking for the FEV1, the FEV1/FVC ratio and the DcO. There is no relationship seen between smoking status and pleural thickening. There is a slight increase in the frequency of asbestos-related x-ray findings. There is a very slight trend toward increasing asbestos-related physical exam findings by smoking status and a slightly higher frequency of reported dyspnea, although the highest proportion was in the light smokers.

TABLE 2
Distributions of Variables
by Examination Center

VARIABLE	UCLA	HARBOR GENERAL	CEDARS-SINAI
	(N=275)*	(N=320)*	(N=242)*
	Percent	Percent	Percent
Pleural Thickening			
Normal	37.4	25.5	40.0
Marked	3.7	19.8	20.4
Other	59.0	54.7	39.6
Xray Results			
Normal	72.2	55.0	59.8
Nonasbestos abnormality	13.2	3.1	14.2
Asbestos-related abnormalities	14.7	41.8	25.9
Nonasbestos Occupational Exposures	59.9	70.2	17.7
Exposure Product Length-Exposure x Severity			
Lowest quartile	25.9	24.9	25.0
2nd lowest quartile	24.3	23.6	28.4
2nd highest quartile	23.5	22.7	24.2
Highest quartile	26.3	28.8	22.5
Total Length of Exposure			
Lowest quartile	25.8	23.0	21.8
2nd lowest quartile	24.2	27.5	30.3
2nd highest quartile	25.0	25.9	23.1
Highest quartile	25.0	23.6	24.8
Severity			
Severe	24.0	32.2	17.4
Mixed	66.9	61.9	75.6
Mild	7.6	4.7	6.2

* N varies slightly from variable to variable because of missing values (see Table 1).

TABLE 2
(Page two of three)

VARIABLE	UCLA (N=275)* Percent	HARBOR GENERAL (N=320)* Percent	CEDARS SINAI (N=242)* Percent
Current Smoking Status			
Nonsmoker	20.9	20.3	26.4
Former-heavy (10+ pack yrs)	34.4	43.2	33.5
Former-light (0-9 pack yrs)	18.7	17.5	15.1
Current-heavy (10+ pack yrs)	19.0	16.5	22.6
Current-light (0-9 pack yrs)	7.0	2.5	2.5
Race			
White	53.1	70.0	60.0
Black	29.5	19.4	34.2
Hispanic	10.9	4.1	4.4
Oriental	1.1	1.3	0.0
Other	5.5	5.3	1.3
Age			
Under 52	34.4	26.3	37.6
52-60	36.6	38.9	31.0
Over 60	28.9	34.8	31.4

TABLE 2
(Page three of three)

VARIABLE	UCLA	HARBOR GENERAL	CEDAR-SINAI
Pulmonary Function Tests			
FEV1, <80%	20.9	23.2	19.9
FVC, <80%	20.5	28.2	18.2
FEV1/FVC, <70%	27.5	18.1	27.1
TLC, <80%	7.0	5.6	5.1
TLC, >120%	10.7	10.3	13.6
DcO, <75%	30.9	Data not Collected	Data not Collected
Dyspnea			
None	15.0	37.5	21.2
Mild	36.5	35.0	64.7
Moderate	31.0	22.2	13.7
Severe	17.5	5.3	0.4
Physical Exam			
Normal	14.7	36.4	36.2
Nonasbestos abnormality	61.2	48.9	48.1
Asbestos-related abnormality	24.2	14.7	15.7

TABLE 3
Examination Results
by Smoking History

	ALL WORKERS			NON-SMOKERS			LIGHT SMOKERS 0-9 Pack-years			HEAVY SMOKERS 10 or more pack-years		
	Frequency	Mean % Predicted	Percent with Abnormal Value	Frequency	Mean % Predicted	Percent with Abnormal Value	Frequency	Mean % Predicted	Percent with Abnormal Value	Frequency	Mean % Predicted	Percent with Abnormal Value
FEV_1 (<80%)*	178	92.8%	21%	21	100.5%	11%	34	95%	19%	122	89%	26%
FVC (<80%)	189	90.72%	23%	28	93.9%	15%	38	91%	22%	122	89%	26%
TLC (<80%)	46	102.74%	6%	9	102%	5%	18	99.8%	10%	22	103.7%	5%
TLC (>120%)	94	102.74%	11%	18	102%	9.7%	15	99.8%	8.5%	61	103.7%	13%
FEV_1/FVC ratio (<70%)	197	73.9%	24%	20	78%	11%	27	77%	15%	149	71%	32%
DcO (<75%)	82	82.7%	31%	8	89%	14%	16	86%	23%	58	79%	39%
Pleural thickening moderate/severe	122		14.5	24		13%	24		14%	72		15%
Non-normal (NE 0) Pleural thickening	552		66%	128		70%	110		62%	309		66%
X-Ray												
Asbestos-related†	235		28%	41		22%	50		28%	143		30%
One of any abnormalities‡	313		37%	59		32%	74		42%	179		38%
Physical Exam												
Asbestos-related**	149		18%	27		15%	30		17%	92		20%
One of any abnormalities***	582		70%	118		64%	125		71%	338		72%
Dyspnea	623		74%	133		72%	139		79%	346		74%
Total N	837			184			176			469		

NOTE: DcO for UCLA center only, therefore column %'s are based on the following numbers:

all workers	265	light smokers	70	mean %'s are for all %'s predicted
non-smokers	57	heavy smokers	147	(this includes normal and abnormal)

* Figures in () represent the cutoff used to define abnormal values for each pulmonary function test

† Worker was diagnosed as having one or more of the following: pleural plaques, calcifications, ill-defined heart/diaphragm, pleural effusion, nodules (opacities)

‡ Worker was diagnosed as having one or more of the following: nodules (opacities), pleural plaques or calcifications, outline of heart or diaphragm ill-defined, shaggy, etc., pleural effusion, enlarged heart, heart slightly enlarged or at upper limit of normal

** Worker was diagnosed as having one of the following: dry cough, clubbing of fingers, basilar rales

*** Workers was diagnosed as having one of the following: dry cough, productive cough, chest tightness, wheezing, clubbing of fingers, cyanosis of skin or mucous membranes of mouth, basilar rales, cardiac abnormalities

In Table 4, the frequency of pulmonary function abnormalities are shown for the highest and lowest quartiles of both total length of exposure to asbestos and the product of length of exposure and severity of exposure. One can see in this table that there was little, if any, relationship between these variables and pulmonary function abnormalities. Although there was a slightly greater proportion of abnormal FEV1/FVC ratio in the highest quartile. In Table 5, one can see a slightly greater frequency of abnormal FEV1/FVC ratio and DcO in those workers who reported exposure to visible asbestos dust, although workers not reporting such exposure had a higher proportion of heavy smokers.

In Table 6, the population is classified according to the age at first exposure broken at greater than or equal to 25 years of age and those who were under 25 at their first exposure. There is a slightly higher percentage of abnormal pulmonary functions for those who were over 25 at the time of their first exposure. The differences vary by smoking status and may not be meaningful. Note also in this table that those first exposed after the age of 25 reported a higher frequency of moderate dyspnea and were found to have a higher frequency of asbestos-related physical exam abnormalities and that these two effects were largely confined to nonsmokers.

In Table 7 and 8 the population is divided into a variety of different groups of nonasbestos occupational exposures and groups of symptom and physical exam results. These groups are then compared for other factors such as pulmonary function, smoking status and a variety of exposure variables. In Table 7 the subjects who reported a prior nonasbestos-related occupational exposure had somewhat more abnormal pulmonary function values, particularly in the FVC, although this did not effect the FEV1/FVC ratio. The smoking distribution was essentially identical. Those who were not exposed to other occupational exposures

TABLE 4
Pulmonary Function Results
by Asbestos Exposure

	Product Length of Exposure x Severity		**Total Length of Exposure**	
Pulmonary Function Test	Lowest Quartile	Highest Quartile	Lowest Quartile	Highest Quartile
FEV1 (<80%)	21.4	20.8	22.1	19.1
FVC (<80%)	22.5	22.6	23.6	19.6
TLC (<80%)	6.5	4.7	6.8	3.4
TLC (>120%)	11.5	11.3	10.7	13.7
FEV1/FVC (<70%)	22.6	28.3	22.9	26.9
DcO (<75%)	33.9	26.6	33.2	27.0

TABLE 5
Pulmonary Function Results
and Smoking History by
Visible Asbestos Dust Exposure

	WORKERS REPORTING EXPOSURE TO VISIBLE ASBESTOS DUST			WORKERS NOT REPORTING EXPOSURE TO VISIBLE ASBESTOS DUST		
Pulmonary Function Test	Total Number	Number Abnormal	% Abnormal	Total Number	Number Abnormal	% Abnormal
FEV1 (<80%)*	773	166	21	55	12	22
FVC (<80%)	773	177	23	55	12	22
TLC (<80%)	771	45	5.8	55	4	7.3
TLC (>120%)	771	89	11.5	55	5	9.1
FEV1/FVC (<70%)	774	186	24	55	11	20
DcO (<75%)	243	77	31.7	22	5	22.7

Smoking History	Number Reporting	Percent Reporting	Number Reporting	Percent Reporting
Nonsmokers	172	22.3	12	22.2
Light Smokers (0-9 pack-yrs)	171	22.2	4	7.4
Heavy Smokers (10+ pack-yrs)	430	55.6	38	70.3

* Numbers in () represent cutoff level for defining abnormal

TABLE 6
Perfect Distributions of Examination
Findings by Age First Exposed to
Asbestos and Smoking History

Variable	AGE FIRST EXPOSED TO ASBESTOS - TOTAL Under 25 yrs (n=328)	AGE FIRST EXPOSED TO ASBESTOS - TOTAL ≥25 yrs (n=496)	AGE FIRST EXPOSED TO ASBESTOS - NONSMOKERS Under 25 yrs (n=71)	AGE FIRST EXPOSED TO ASBESTOS - NONSMOKERS ≥25 yrs (n=110)	AGE FIRST EXPOSED TO ASBESTOS - LIGHT SMOKERS Under 25 yrs (n=68)	AGE FIRST EXPOSED TO ASBESTOS - LIGHT SMOKERS ≥25 yrs (n=103)	AGE FIRST EXPOSED TO ASBESTOS - HEAVY SMOKERS Under 25 yrs (n=187)	AGE FIRST EXPOSED TO ASBESTOS - HEAVY SMOKERS ≥25 yrs (n=278)
PFT's								
FEV1 (<80%)	21.0	22.0	8.5	13.6	23.5	17.5	25.1	27.0
FVC (<80%)	20.0	24.8	14.1	16.4	19.1	24.3	23.1	28.4
TLC (<80%)	7.3	5.1	2.8	6.4	13.2	8.7	7.0	3.2
TLC (>120%)	9.5	12.8	9.9	9.2	7.4	9.7	9.6	14.8
FEV1/FVC (<70%)	20.5	25.9	9.7	11.8	16.4	15.2	26.3	35.5
DcO (<75%)	28.1	33.3	13.6	16.7	20.0	26.3	37.1	42.7
Nonasbestos Occupational Exposures								
None	38.4	50.0	45.5	45.9	33.3	53.2	37.3	50.2
One or more	61.6	50.0	54.5	53.1	66.7	46.8	62.7	49.8
Dyspnea								
None	27.6	23.6	36.1	20.9	23.2	19.8	25.7	26.2
Mild	46.4	42.8	41.7	40.0	43.5	42.5	49.2	43.7
Moderate	18.2	25.6	15.3	29.1	20.3	27.4	18.7	23.7
Severe	7.9	8.0	6.9	10.0	13.0	10.4	6.2	6.5
Physical Exam								
Nonasbestos abnormality	54.5	51.5	57.1	46.3	55.9	53.8	53.5	52.9
Asbestos-related abnormality	15.4	20.2	71.0	20.4	16.2	18.3	18.4	21.0

TABLE 6
(Page two of two)

Variable	AGE FIRST EXPOSED TO ASBESTOS - TOTAL		AGE FIRST EXPOSED TO ASBESTOS - NONSMOKERS		AGE FIRST EXPOSED TO ASBESTOS - LIGHT SMOKERS		AGE FIRST EXPOSED TO ASBESTOS - HEAVY SMOKERS	
	Under 25 yrs (n=328)	≥25 yrs (n=498)	Under 25 yrs (n=72)	≥25 yrs (n=110)	Under 25 yrs (n=69)	≥25 yrs (n=106)	Under 25 yrs (n=185)	≥25 yrs (n=278)
Pleural Thickening								
Normal	33.2	33.7	31.9	29.1	36.2	38.7	33.0	33.8
Marked	16.5	13.5	15.3	11.8	13.0	13.2	17.8	14.0
Other	50.3	52.8	52.8	59.1	50.7	48.1	49.2	52.2
Xray Results								
Nonasbestos abnormalities	10.5	8.9	9.7	9.1	17.4	11.4	8.3	8.0
Asbestos related abnormalities	26.9	29.7	23.6	21.8	24.6	31.4	19.4	32.2
Severity of Exposure								
Severe	17.8	29.8	16.7	31.8	23.2	37.7	16.0	26.2
Mixed	75.2	62.6	76.4	60.9	69.2	56.6	77.1	65.2
Mild	5.1	6.8	4.2	7.3	7.2	5.7	4.8	7.2
Visible Asbestos Exposure								
No visible asbestos dust	4.5	8.0	4.2	8.2	4.3	0.9	4.8	10.4
Visible asbestos dust	95.5	92.0	95.8	91.8	95.7	99.1	95.2	89.6
Smoking								
Light smoker	20.8	21.2	0	0	100	100	0	0
Heavy smoker	56.8	55.8	0	0	0	0	100	100
Nonsmoker	21.8	22.0	100	100	0	0	0	0

TABLE 7
Percentage Distributions of
Cross Classified Variables

VARIABLE	NONASBESTOS OCCUPATIONAL EXPOSURES		DYSPNEA				PHYSICAL EXAM RESULTS		
	Yes n=397	No n=328	None n=211	Mild n=365	Moderate n=186	Severe n=66	Normal n=238	Nonasbestosis Abnormalities n=427	Asbestos Related Abnormalities n=149
Pulmonary Function Tests									
FEV1 (<80%)	22.7	19.5	13.7	21.9	27.4	27.3	12.2	22.7	32.9
FVC (<80%)	27.2	17.7	17.1	18.9	32.3	36.4	16.4	23.0	32.9
TLC (<80%)	7.3	5.2	3.3	5.5	8.6	9.1	5.0	5.4	9.4
TLC (>120%)	9.3	13.1	13.7	10.2	10.8	12.1	7.6	13.4	10.1
FEV1/FVC (<70%)	23.5	23.3	14.4	26.6	26.9	28.8	11.8	27.5	32.4
DcO (<75%)	31.8	29.6	16.2	28.6	34.9	40.4	23.1	30.4	35.9
Smoking History									
Light Smokers	22.1	21.3	17.6	20.6	22.9	30.8	20.4	21.8	20.2
Heavy Smokers	55.6	55.6	58.1	59.1	54.0	44.6	53.2	57.1	61.5
Years Since First Asbestos Exposure									
3-20 years	34.7	33.0	32.3	31.3	37.0	42.4	35.3	32.4	34.2
21-34 years	31.9	34.5	38.9	34.6	28.0	22.7	34.5	32.4	32.9
Over 34 years	33.4	32.4	28.9	34.1	34.9	34.8	30.3	35.2	32.9

TABLE 7
(Page two of two)

VARIABLE	NONASBESTOS OCCUPATIONAL EXPOSURES		DYSPNEA				PHYSICAL EXAM RESULTS		
	Yes n=397	No n=328	None n=211	Mild n=365	Moderate n=186	Severe n=66	Normal n=238	Nonasbestos Abnormalities n=427	Asbestos Related Abnormalities n=149
Age First Exposed to Asbestos									
Under 25 yrs old	44.9	33.7	43.5	41.7	31.9	39.4	41.4	41.2	33.6
25 or older	55.1	66.3	56.5	58.3	68.1	60.6	58.6	58.8	66.4
Asbestos Dust Visible									
Yes	90.7	95.2	94.3	92.4	94.7	92.4	92.5	94.7	91.9
Severity of Exposure									
Severe	27.4	23.5	18.9	21.7	33.3	39.4	20.1	26.6	28.9
Mixed	65.9	69.3	72.2	70.9	62.4	50.0	71.5	67.4	62.4
Mild	6.3	6.3	8.0	5.7	3.2	10.6	6.7	5.3	7.4
Exposure Product (Length of Exposure x Severity									
Low	7.8	7.0	7.8	7.8	6.2	9.7	8.2	7.2	7.7
Medium	56.3	63.1	61.8	59.7	61.8	56.5	64.9	57.3	61.3
High	35.9	29.9	30.4	32.5	32.0	33.9	26.8	35.4	31.0
Total Length of Exposure									
Lowest Quartile	28.0	29.2	26.4	25.0	35.0	30.6	28.4	27.4	27.8
2nd Lowest Quartile	24.0	18.4	21.2	24.5	18.6	22.6	23.3	21.7	20.8
2nd Highest Quartile	22.7	25.1	27.9	20.6	30.1	21.0	24.6	23.9	29.2
Highest Quartile	25.2	27.4	24.5	29.9	16.4	25.8	23.7	27.0	22.2

TABLE 8
Percentage Distribution of
Cross Classified Variables

VARIABLE	PLEURAL THICKENING		XRAY RESULTS			
	None n=274	Marked n=121	Other n=429	Normal n=506	Nonasbestos Related Abnormalities n=79	Asbestos Related Abnormalities n=231
Pulmonary Function Tests						
FEV1 (<80%)	21.5	24.0	20.3	19.4	20.3	25.1
FVC (<80%)	21.5	25.6	22.6	20.9	20.3	27.3
TLC (<80%)	4.0	3.3	7.9	5.6	13.9	4.3
TLC (>120%)	14.7	10.7	9.6	11.7	5.1	12.1
FEV1/FVC (<70%)	24.3	27.3	22.2	22.7	20.5	25.8
DcO (<75%)	30.3	12.5	31.8	30.3	26.5	36.8
Smoking History						
Nonsmoker	20.1	20.2	24.4	24.8	23.1	17.6
Light Smoker	23.8	19.3	20.2	19.9	30.8	21.5
Heavy Smoker	56.1	60.5	55.4	55.3	46.1	61.0
Years Since First Asbestos Exposure						
3-20 Years	39.6	22.1	33.3	38.0	39.2	23.5
21-34 Years	32.7	34.4	33.3	32.9	26.6	35.5
Over 34 Years	27.7	43.4	33.3	29.1	34.2	41.0

TABLE 8
(Page two of two)

VARIABLE	PLEURAL THICKENING		XRAY RESULTS			
	None n=274	Marked n=121	Other n=429	Normal n=506	Nonasbestos Related Abnormalities n=79	Asbestos Related Abnormalities n=231
Age First Exposed to Asbestos						
Under 25 yrs old	39.4	44.6	38.6	39.9	43.6	37.2
25 or older	60.6	55.4	61.4	60.1	56.4	62.8
Asbestos Dust Visible						
Yes	91.4	93.4	95.1	92.5	91.1	96.6
Severity of Exposure						
Severe	22.2	23.8	27.2	25.7	16.5	26.5
Mixed	68.1	69.7	66.7	66.9	78.5	65.8
Mild	7.5	5.7	5.3	6.3	3.8	6.4
Exposure Product						
Low	10.5	5.8	6.3	8.2	6.7	7.0
Medium	62.9	49.2	62.0	64.1	62.7	51.1
High	26.6	45.0	31.6	27.7	30.7	41.9
Total Length of Exposure						
Lowest Quartile	34.8	19.8	25.9	31.1	2.5	20.0
2nd Lowest Quartile	19.2	17.4	25.7	23.0	20.8	21.3
2nd Highest Quartile	23.2	30.6	23.7	24.4	23.4	25.7
Highest Quartile	22.8	32.2	24.7	21.4	23.4	33.0

were first exposed to asbestos more frequently over the age of 25 and reported more frequent exposure to visible asbestos dust. This group also had the highest proportion of the higher exposure product.

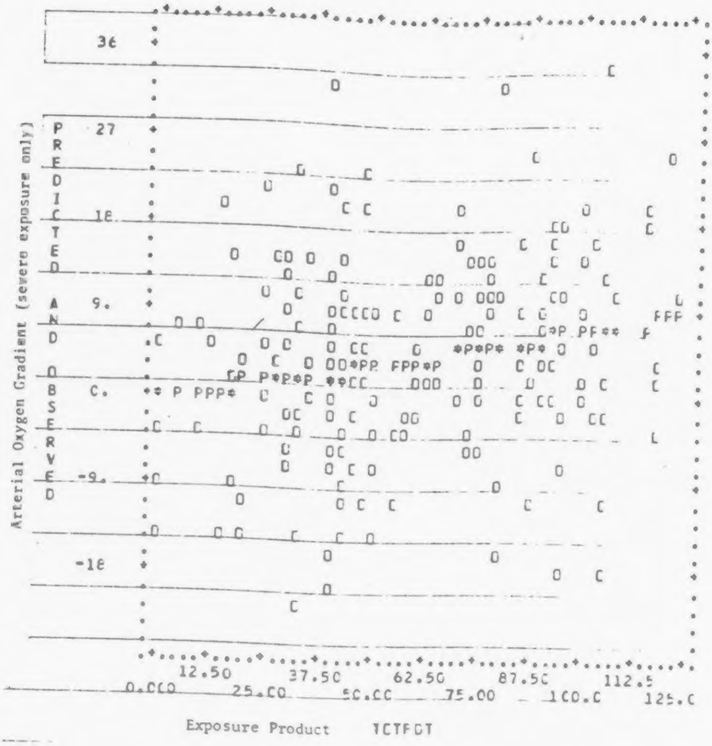
In Table 7 when the population was divided into those reporting and not reporting dyspnea, one can see the expected gradient of increasing frequency of pulmonary function abnormalities with more severe dyspnea. The smoking status across groups is relatively similar but there is a lower percentage of heavy smokers in the moderate and severe dyspnea group. The group reporting severe dyspnea is weighted more heavily toward shorter exposure to asbestos and to exposure after the age of 25. The groups do not differ on exposure to visible dust, but the severe dyspnea group had a higher proportion of those classed as severe exposure and a slightly greater proportion of the higher exposure product.

Again in Table 7 the population of subjects was divided into those in which the physical exam was normal and those with asbestos or nonasbestos related physical exam abnormalities. The group which had asbestos related abnormalities also had a higher frequency of pulmonary function test abnormalities, especially for the FEV1 and FVC. However, this group also had a higher percentage of heavy smokers. The groups did not differ on the exposure variables except that those with asbestos related abnormalities had a higher frequency of first exposure after the age of 25.

In Table 8, when the subjects are divided into those with and without pleural thickening, there is little relationship between pleural thickening and pulmonary function test results except for a markedly lower frequency of abnormalities in DcO in those with marked pleural thickening. Those with marked pleural thickening also have a higher proportion of heavy smokers. There is a dramatic increase in years since first exposure, a higher frequency of longer duration of exposure and a greater frequency of higher product of exposure and severity for those in the marked pleural thickening group. However, those with marked pleural thickening also reported being more frequently exposed at less than age 25 and also to be less frequently exposed to visible dust. When divided according to x-ray results other than pleural thickening, the group with asbestos related x-ray abnormalities have a greater frequency of abnormal pulmonary function test results. This group also had a higher proportion of former heavy smokers, a higher proportion of longer time since first exposure, a higher exposure product and greater total length of exposure than the other groups.

Linear regression analysis of the exposure product on the pulmonary function tests showed no relationship between these variables except for the arterial oxygen gradient. A statistically significant correlation was found between higher exposure product and higher arterial oxygen gradient, but only for those classed as having severe exposure. This means, in effect, that within the group which had severe exposure, the arterial oxygen gradient was positively correlated with the length of exposure. This is shown in Figure 1. Note that even though highly statistically significant, only 5% of the variance of arterial oxygen gradient could be explained by the relationship with the exposure product.

FIGURE 1
Linear Regression
Arterial Oxygen Gradient and Exposure Product



```
MULTIPLE R                 0.2267
MULTIPLE R-SQUARE          0.0514           STD. ERROR OF EST.        9.8537

ANALYSIS OF VARIANCE
                      SUM OF SQUARES    DF    MEAN SQUARE       F RATIO    P(TAIL)
        REGRESSION       1062.1536       1      1062.1536        10.939     0.0011
        RESIDUAL        19613.4375     202        97.0962

                                                   STD. REG
   VARIABLE        COEFFICIENT   STD. ERROR         COEFF          T    P(2 TAIL)
INTERCEPT            -0.54962
TOTFCT     52         0.07548     0.02282           0.227       3.307    0.0011
```

The results of multivariate analysis are shown in Table 9. For the pulmonary function test results, age and smoking status were the primary variables entered. For the asbestos related exam findings, some of the asbestos exposure variables were more important. However, the coefficients were predominantly negative. The age at first exposure to asbestos (<25, >25) entered only for dyspnea and for asbestos related physical exam abnormalities, in both cases with a negative coefficient.

TABLE 9

Results of Multivariate Analyses

			Logistic Regression						
			Stepwise				Forced [2]		
Dependent Variable	Independent Variable	p-Value for[1] Stepwise Discrim. Anal.	Coeff.	p-Value[1]	$\hat{OR}$[3]	95% Confidence Interval $\hat{OR}$	Coeff.	p-Value[1]	$\hat{OR}$[3]
FVC	Non-asbestos occupational exposure	.01	.668	.0004	1.95	(1.35, 2.82)	.677	.0004	1.95
	Age	.0005	.028	.009			.0253	.017	--
	Smoker	.0005	.545	.024	1.72	(1.07, 2.77)	.535	.027	1.71
	Black	--	--				-.233	.28	NS[5]
	Exposure Product	--	--				.0018	.28	NS
	Constant		-3.61				-3.52		
	Hosmer's Goodness of Fit p-Value:		.568[4]					.040	
TLC	Non-asbestos occupational exposure	--	--				.284	.37	NS
	Age	.001	-.0275	.093			-.0311	--	NS
	Smoker	--	--				.215	.58	NS
	Age first exposed	--	--				.0011	.96	NS
	Years exposed	--	--				-.0004	.98	NS
	Constant		-1.05				-1.15		
	Hosmer's Goodness of Fit p-Value:		.598					.847	
FEV_1	Smoker	.0005	.914	.0002	2.49	(1.52, 4.09)	.914	.0002	2.49
	Age	.0005	.0311	.003			.0312	.003	
	Black	--	-.509	.017	.60	(.40, .91)	-.509	.017	.60
	Mild exposure	--	--				-.223	.76	NS
	Mod + Severe exposure	--	-.384	.04	.68	(.47, .98)	-.596	.40	NS
	Constant		-3.41				-3.20		
	Hosmer's Goodness of Fit p-Value:		.417					.454	
FEV_1/FVC	Age	.0005	.0648	.0001			.0677	.0001	
	Smoker	.0005	-.213	.10	.81	(.63, 1.04)	-.215	.097	.81
	Age first exposed	--	--				-.00013	.99	NS
	Years exposed	--	--				-.0053	--	NS
	Constant		-4.42				-4.43		
	Hosmer's Goodness of Fit p-Value:		.531					.023	

Dependent Variable	Independent Variable	p-Value for Stepwise Discrim. Anal.	Logistic Regression						
			Stepwise				Forced		
			Coeff.	p-Value	$\hat{OR}$	95% Confidence Interval $\hat{OR}$	Coeff.	p-Value	$\hat{OR}$
Productive cough	Age	.01	-.0201	.01			-.0134	.13	
	Age first exposed	--	--				-.0095	.25	
	Exposure product	--	--				-.0028	.095	
	Smoker	--	--				-.221	.20	NS
	Constant		1.20				1.43		
	Hosmer's Goodness of Fit p-Value:				.727			.568	
Asbestos-Related X-Ray Abnormalities	Age	.0005	-.043	.0001			-.0561	.0001	
	Age first exposed	.0005	--				.0132	.12	
	Smoker	--	-.393	.052	.675	(.45, 1.00)	-.393	.052	.675
	Visible asbestos dust	--	-.764	.055	.465	(.21, 1.02)	-.764	.055	.465
	Years exposed	--	-.0171	.04			-.0039	--	NS
	Constant		4.87				4.87		
	Hosmer's Goodness of Fit p-Value:				.231			.231	
Pleural Thickening	Years exposed	.025	-.0251	.015			-.0169	.15	
	Age	--	--				-.0169	.24	NS
	Non-asbestos occupational exposure	--	--				.253	.24	NS
	Smoker	--	--				-.0289	.91	NS
	Age first exposed	--	--				.00243	--	NS
	Constant		2.47				3.01		
	Hosmer's Goodness of Fit p-Value:				.596			.873	

Dependent Variable	Independent Variable	p-Value for Stepwise Discrim Anal.	Logistic Regression						
			Stepwise				Forced		
			Coeff.	p-Value	$\hat{OR}$	95% Confidence Interval $\hat{OR}$	Coeff.	p-Value	$\hat{OR}$
Asbestos-Related Physical Exam Abnormalities	Age	.001	-.0266	.02					
	Age first exposed	.0005	-.0178	.06					
	Smoker	--	--				Not Done		
	Mild exposure	--	--						
	Mod + Severe exposure	--	--						
	Constant		3.55						
	Hosmer's Goodness of Fit p-Value:				.228				
Dyspnea	Mod + Severe exposure	(not used)	.352	.09	1.42	(.94, 2.14)			
	Age first exposed	.0005	-.0311	.0002	--				
	Exposure product	.0005	-.0151	.006	--		Not Done		
	TBA	.0005	.0272	.04	--				
	Mild exposure	--	--						
	Moderate exposure	.0005	(not used)		--				
	Constant		1.66						
	Hosmer's Goodness of Fit p-Value:				.118				

[1] Variables are in the order they entered; p-values are for F-statistics which include all previously entered variables.

[2] All variables entered into equation even if non-significant.

[3] p-values for logistic regression are for (coefficient/S.E.) taken roughly as a t-statistic.

[4] Estimated Odds Ratio for dichotomous variables.

[5] Not statistically significant

[6] For Hosmer's Goodness-of-fit p-value, the larger the p-value (>0.10), the better the fit.

VI. Discussion

We have not found the results of a similar survey reported in the literature. Thus the data from this large survey population on the frequency and interrelations of a variety of asbestos exposure variables, confounding variables and examination results is of major interest to both researchers and clinicians interested in the problems of asbestos exposed workers. The results of univariate analysis seem to indicate that the exposure variables generally do relate to the frequency of established asbestos related examination findings, particularly pleural thickening, pleural plaques and rales on physical exam. Most of the asbestos related abnormalities were also seen more frequently in those who were exposed after the age of 25. This has been reported for risk of lung cancer but has not been established for asbestosis. However, these results are not supported by multivariate analyses, and in fact, the multivariate results are in the opposite direction.

There was little relationship between the asbestos exposure variables and pulmonary function test abnormalities either in univariate or multivariate analyses. The pulmonary function tests did vary, as would be expected, substantially by smoking status. There is very little evidence in this data set to suggest that there is any interaction between smoking and asbestos exposure in these lung findings. The asbestos exposure variables related primarily to the asbestos related physical findings, but not to pulmonary function testing. The smoking status, on the other hand, related primarily to pulmonary function testing and did not relate in most cases to the presence or absence of physical exam findings.

An interesting relationship is seen in those workers reporting severe dyspnea , who also had a higher frequency of exposure after the age of 25 and short exposure. This finding might suggest that the workers who are more highly susceptible and affected after a shorter period of time would tend to leave the asbestos industry and therefore be underrepresented in a survey such as this. The results of multivariate analysis support this conclusion. The fact that those exposure variable which entered did so with negative coefficients suggests that those individuals who were affected by their exposure either had left the shipyard or did not participate in these examinations. In the severe dyspnea group there was also a lower frequency of current heavy smokers. This is likely to be the result of the effect of severe dyspnea in encouraging these workers to quit smoking.

While this data is both interesting and important, there are several caveats which must be kept in mind in any interpretation of the data. The first of these is the fact that this was a survey in which many affected workers may have left employment prior to the time of the survey. In addition, there was a selection process, which is not entirely clear, by which approximately two-thirds of the subjects were seen at the examination centers for evaluation while the rest went through a third party process. We do not know what factors led to this separation, but it should be presumed that the group which were examined in these examination centers were not representative of all of the workers who were screened positive in the initial survey. Thus, care must be taken in extrapolation of these results to the larger worker population.

A second major caveat relates to the differences observed between the different examination centers and shown in Table 2. While the selection or assignment of subjects to one center or another was not done on any known a priori basis, the process also was not random. The subjects examined in the different centers did appear to be fairly similar with regard to smoking status, age and exposure history. There were major differences, however, in the physical exam and x-ray results between centers. These differences suggest that there was a general non-comparability between centers in the methods of questionnaire administration, physical exam procedures and x-ray interpretation. In the case of the x-ray, for example, the x-rays were interpreted by a variety of radiologists, none of whom were certified B readers. This lack of standardization introduces the potential for considerable variation in the interpretations both between centers and over time within centers. Unfortunately this much noncomparability between centers makes all of the comparisons that have been made somewhat suspect.

The two caveats mentioned above are serious and should be kept firmly in mind in interpretation of the results of this analysis. However, we believe that this data is still useful as a guide to what may be expected in similar exposed worker populations. In particular, the results seem to support those who feel that pulmonary function test abnormalities are not related to asbesosis. However, it is possible that there could be a selective loss from the worker population of those workers in whom pulmonary function abnormalities did not specifically examine pulmonary function defined obstructive airway disease in this analysis.

References

1. Levine, RJ, ed. Asbestos: An Information Resource. Prepared by the Stanford Research Institute International, Menlo Park, California, for the Division of Cancer Control and Rehabilitation, National Cancer Institute, May 1978.

2. Craighead, JE, and Brooke, TM, The Pathogenesis of Asbestos-Associated Diseases, The New England Journal of Medicine 306(24): 1446-1451, June 17, 1982.

3. Pelton, JS, Radiographic Search for Asbestos-Related Disease in a Naval Shipyard, Annals of the New York Academy of Sciences 330: 341-352, 1979.

APPENDIX I

ABSTRACT GUIDE

Identification Number ☐☐☐☐ 1-4

The first box indicates the center from which the file was taken, i.e. 1 - UCLA, 2 - Harbor General, 3 - Cedar Sinai.

QUESTIONS:

1. Age ☐☐ 5-6
2. Give the race using the following code: 1 - WHITE, 2 - BLACK, 3 - HISPANIC, 4 - JAPANESE, 5 - CHINESE, 6 - OTHER ☐ 7
3. Height: Give in centimeters. ☐☐☐ 8-10
4. Weight: Give in kilograms. ☐☐☐ 11-13

EXPOSURES - ASBESTOS

5. Information source and number of exposures ☐ 14
    1. Information on asbestos exposure is obtained from an A type form and there are no more than 4 exposures.
    2. Information on asbestos exposure is obtained from an A type form and there are 5 or more exposures.
    3. Information on asbestos exposure is obtained from a B type form and there are no more than 4 exposures.
    4. Information on asbestos exposure is obtained from a B type form and there are 5 or more exposures.
    5. Record the information from the B-type form below, and record the information from the A-type form on the last page.

    An example of the A and B-type forms are at the end of the guide.

	1st Year Exposed	Frequency and Duration of Exposure	Degree of Exposure	Occupation	Time Exposed	
1st Exposure	☐☐	☐	☐	☐	☐☐	15-21
2nd Exposure	☐☐	☐	☐	☐	☐☐	22-28
3rd Exposure	☐☐	☐	☐	☐	☐☐	29-35
4th Exposure	☐☐	☐	☐	☐	☐☐	36-42

Count 10 months of exposure or more as 1 year exposure. For 9 months of less of exposure, put a 9 in the first box and the number of months exposed in the second box.

Use the following FORM-specific codes for frequency/duration and degree of exposure.

FORM A - Employer's Account

Frequency and duration of exposure -

1. Primary: worked directly with asbestos on a regular basis, i.e. insulator, pipefitter, machinist, shipfitter
2. Secondary: worked in conjunction with employees with primary exposure, i.e. welder, electrician
3. Intermittent: worked occasionally at a site where asbestos was used, i.e. inspector
4. Environmental: worked at a facility where asbestos was used, i.e. foreman, administrative employee
5. Don't know

Degree of exposure -

1. Heavy: asbestos particles visible in the air
2. Moderate: asbestos dust visible on floor and work surfaces
3. Light: no dust visible but asbestos was in use
4. Don't know
5. Light to moderate
6. Moderate to heavy

FORM B - Patient's Account

Frequency and duration of exposure -

1. Severe (primary)
2. Moderate (secondary)
3. Mild (intermittant or environmental)
4. None
5. Don't know
6. Mild to moderate
7. Moderate to severe
8. Mild, moderate and severe
9. Other, specify

Degree of exposure -

1. a. yes
   b. heavy
   c. more than 75% of the time
2. a. no
   b. light
   c. mild
3. don't know
4. a. sometimes, but not usually
   b. dust 1-50% time
   c. mild to moderate
5. a. usually, but not always
   b. moderate to heavy
   c. dust 51-75% of time
6. moderate

First year exposed, occupation and number of years exposed are recorded the same for both forms.

Exposure history includes all exposures to asbestos and is not only limited to asbestos exposures in government shipyards.

Now sum the scores of the 8 variables. The sum uniquely identifies their pattern. Enter the sum in boxes.

Decoding - $2^1 = 2$; $2^2 = 4$; $2^3 = 8$; $2^4 = 16$; $2^5 = 32$; $2^6 = 64$; $2^7 = 128$; and $2^8 = 256$.

Step 1. Take sum and divide by $2^8 = 256$, if it is equal to 2 then variable 8 (cardiac abnormalities is yes), if not equal to 1 variable, 8 is no.

Step 2. Take the remainder from Setp 1 and divide by $2^7 = 128$, if it is equal to 1 then variable 7 is yes, if not variable 7 is no.

Step 3. Take the remainder from Step 2 and divide by $2^6 = 64$, if it is equal to 1 then variable 6 is present, if not, then variable 6 is absent.

Step 4. Take the remainder from Step 3 and divide by $2^5 = 32$, if it is equal to 1 then variable 5 is present, if not, then variable 5 is absent.

Step 5. Take the remainder from Step 4, divide by $2^4 = 16$, if equal to 1 then variable 4 is present, if not equal to 1, then variable 4 is absent.

Step 6. Take the remainder from Step 5, divide by $2^3 = 8$, if equal to 1 then variable 3 is present, if not equal to 1 then variable 3 is absent.

Step 7. Take the remainder from Step 6, divide by $2^2 = 4$, if equal to 1 then variable 2 is present, if not equal to 1 then variable 2 is absent.

Step 8. Take the remainder from Step 7, divide by $2^1 = 2$, if equal to 1 then variable 1 is present, if not equal to 1 then variable 1 is absent.

6. Non-asbestos occupationally related exposures. ☐ 43
   0. None
   1. Paint, solvents
   2. Dry cleaners for clothes
   3. Gasoline and oils
   4. Asphalt and tar
   5. Creasote
   6. Dyes and stains
   7. Crop dusts and sprays
   8. Two or more exposures, specify
   9. Other, specify

SMOKING HISTORY

7. Do you presently smoke cigarettes? ☐ 44

   1. NO, never smoked. Go to question twelve.
   2. NO, former smoker.
   3. YES

8. How many cigarettes do/did you smoke per day? ☐ 45

   1. Less than five (if only pack years are stated, and year stopped smoking,
   2. Five - ten (½ pack) then multiply 1 pack/day by X number of years)
   3. Eleven - fifteen (½ - 1 pack)
   4. Sixteen - twenty (1 pack)
   5. Twenty-one - thirty
   6. Over thirty
   7. Unable to ascertain 9. Not applicable

9. If you smoked more in the past than you do now, give number of cigarettes smoked per day. ☐ 46

   1. Five
   2. Five - ten
   3. Eleven - fifteen
   4. Sixteen - twenty
   5. Twenty-one - thirty
   6. Over thirty
   7. Unable to ascertain
   9. Not applicable

10. How old were you when you began to smoke? Write in the age. ☐☐ 47-48
    77. Don't know 99. Not applicable

11. In total, how many years did you smoke? Write in the years ☐☐ 49-50
    77. Don't know 99. Not applicable, if they give a range, use midpoint.

12. Do you smoke pipes or cigars? ☐ 51

    1. Regularly
    2. Occasionally
    3. Never
    7. Don't know

MEDICAL HISTORY

13. Which of the following have you had? ☐ 52

0. No cancer
1. Lung cancer
2. Cancer of larynx, oropharynx
3. Cancer of the digestive system
4. Cancer of the kidney
5. Mesothelioma
6. Other cancer
7. More than one of the above

14. Which of the following describes your breathlessness (dyspnea)? ☐ 53

1. Dyspnea on moderate exertion (ie. climbing one flight of stairs)
2. Dyspnea on mild exertion (ie. routine daily activities)
3. Dyspnea at rest
0. Normal - no dyspnea

If patient's account contradicts respiratory history (physician's account), record patient's account, except for dyspnea at rest, which must be confirmed by physician

15. Code for the physical examination; ask the question: Does the patient have the following: ☐☐☐ 54-56

Encoding Variable				
1	Dry cough	Must be chronic and not occasional, and not associated with colds.	yes no	2 0
2	Productive cough		yes no	4 0
3	Chest tightness		yes no	8 0
4	Wheezing		yes no	16 0
5	Clubbing of fingers		yes no	32 0
6	Cyanosis of skin or mucous membranes of mouth		yes no	64 0
7	Basilar rales		yes no	128 0
8	Cardiac abnormalities		yes no	256 0
	None of the above			000

If patient reports wheezing, while neither the physical exam or respiratory history does, record patient's account.

If respiratory history (physician's account) contradicts patient's account, try to reconcile the two, and if unable to, then record the account which reports an abnormality.

16. Pleural thickening

0 - absent
    a. no significant pleural thickening
    b. no definite evidence of pleural thickening
1 - slight, includes:
    a. minimized, localized, or mild pleural thickening
    b. +1
2 - moderate
    a. moderately advanced
    b. considerable
    c. mild to moderate
    d. +2 ☐ 57
3 - severe, includes marked pleural thickening
    a. extensive
    b. pronounced
    c. evidence of significant
    d. +3
4 - suggestive pleural thickening, includes:
    a. questional, or suggestive, pleural thickening
    b. indication of pleural thickening or extra pleural fat
    c. no significant pleural thickening
5 - present, otherwise not specified, includes:
    a. noted pleural thickening or evidence of pleural thickening
    b. bilateral, nonspecific or scattered pleural thickening
6 - apical thickening only

17. Fibrosis ☐ 58

0 - normal, unremarkable lung markings
1 - mild interstitial markings-linear densities
    nonspecific increase in interstit-al markings
2 - moderate/severe interstitial marking- linear densities

18. X-ray test results ☐☐ 59-60

1. nodules (opacities)	yes = 2 no = 0
2. pleural plaques or calcifications	yes = 4 no = 0
3. outline of heart of diaphragm ill-defined, shaggy, etc.	yes = 8 no = 0
4. pleural effusion	yes = 16 no = 0
5. enlarged heart	yes = 32 no = 0
6. upper limit of normal or slightly enlarged, left ventricular enlargement	yes = 64 no = 0
7. none of the above	yes = 0 no = 0

If "possible" mentioned for pleural plaque, calcifications, or effusion, code as 4, 4, or 16 respectively (do the same for the rest of the categories); in other words, code as if there were no doubt.

PULMONARY FUNCTION TESTS

		Actual Values	% Predicted	
19.	Vital capacity, (VC), cc	-☐☐☐	☐☐☐	61-63
20.	Forced expired volume, 1 sec. (FEV_1), cc	☐☐☐	☐☐☐	64-66
21.	Total lung capacity (TLC), cc	☐☐☐	☐☐☐	67-69
22.	Carbon monoxide diffusing capacity (DCO), cc/min/mmHg record	☐☐☐	☐☐☐	70-72
23.	Arterial blood gas at room temperature or breathing air	pCO_2 mmHg	☐☐	73-74
		pO_2 mmHg	☐☐☐	75-77
		hemoglobin	☐☐	78-79

DO NOT read values off the exercise test sheet. All values should come from the same pulmonary function white sheet.

If there is a disagreement between the physician's history and the physician's summary, use the physician's summary.

card number two

Identification Number ☐☐☐☐ 1-4

Information source and number of exposures (5th-7th)

	1st year Exposed	Frequency/Duration of exposure	Degree of Exposure	Occe-pation	Time Exposed	
5th exposure	☐☐	☐	☐	☐	☐☐	5-11
6th exposure	☐☐	☐	☐	☐	☐☐	12-18
7th exposure	☐☐	☐	☐	☐	☐☐	19-25

If both information source types are used, please record the information from the A-type form, below (there will be a 5 in column 14).

	1st year Exposed	Frequency/Duration of exposure	Degree of Exposure	Occe-pation	Time Exposed	
1st exposure	☐☐	☐	☐	☐	☐☐	40-46
2nd exposure	☐☐	☐	☐	☐	☐☐	47-53
3rd exposure	☐☐	☐	☐	☐	☐☐	54-60
4th exposure	☐☐	☐	☐	☐	☐☐	61-67
5th exposure	☐☐	☐	☐	☐	☐☐	68-74

FORM A

Employee's Name: ______________________ Location: ______________________

SSAN: ______________________ ______________________

Employee No.: ______________________ ______________________

Job Title	Period		Asbestos Exposure		Other Chemical Or Dust Exposure/ Comments			
	From	To	Degree	Frequency	Material	Degree	Frequency	

FREQUENCY/DURATION OF EXPOSURE

P = Primary: worked directly with asbestos on a regular basis - Insulator, Pipefitter

S = Secondary: worked in conjunction with employees with primary exposure - Welder, Electrician

I = Intermittent: worked occasionally at a site where asbestos was used - Inspector

E = Environmental: worked at a facility where asbestos was used - Foreman, Admin. employee

DEGREE OF EXPOSURE

H = Heavy: asbestos particles visible in the air

M = Mod.: asbestos dust visible on floor & work surface

L = Light: no dust visible but asbestos was in use

____
Authorized Official

A8

FORM B

RENOVATED OR REMODELED, IN THE BOXES BELOW

(Table C)

	Year Started/Stopped		Asbestos Exposure (Mild, Mod. Severe, None)	Visible Asbestos Dust (Yes-No)	Hrs spent Sawing or Abrading Asbestos	Hrs spent Applying Or Removing Asbestos	Hrs spent Remodeling Ships	Hrs spent Visiting Ships	Hrs spent Inspecting Ships
Most Recent 1st Job									
2nd Job									
3rd Job									
4th Job									
5th Job									
6th Job									

Identification Number ☐☐☐☐ 1-4

1. Age ☐☐ 5-6
2. Race ☐ 7
3. Height (cm) ☐☐☐ 8-10
4. Weight (kg) ☐☐☐ 11-13

EXPOSURES - ASBESTOS

5. Information source and number of exposures ☐ 14

	1st year Exposed	Frequency and Duration of exposure	Degree of Exposure	Occupation	Time Exposed	
1st exposure	☐☐	☐	☐	☐	☐☐	15-21
2nd exposure	☐☐	☐	☐	☐	☐☐	22-28
3rd exposure	☐☐	☐	☐	☐	☐☐	29-35
4th exposure	☐☐	☐	☐	☐	☐☐	36-42

6. Non-asbestos, occupationally related exposures ☐ 43
7. Do you smoke cigarettes ☐ 44
8. Number of cigarettes smoked per day ☐ 45
9. Past number of cigarettes smoked per day ☐ 46
10. Age smoking began ☐☐ 47-48
11. Total years smoked ☐☐ 49-50
12. Smoke pipes or cigars ☐ 51

MEDICAL HISTORY

13. Cancer ☐ 52
14. Breathlessness (dyspnea) ☐ 53
15. Physical exam's result ☐☐☐ 54-56

CHECK BOX IF AN EXERCISE STUDY WAS DONE ☐

16. Pleural thickening	☐	57
17. Fibrosis	☐	58
18. X-ray test results	☐☐	59-60

PULMONARY FUNCTION TESTS

		Actual Values	% Predicted	
19. Vital capacity (VC), cc		☐☐☐	☐☐☐	61-63
20. Forced expired volume, 1 sec. (FEV_1) cc		☐☐☐	☐☐☐	64-66
21. Total lung capacity (TLC), cc		☐☐☐	☐☐☐	67-69
22. Carbon monoxide diffusing capacity (DCO), cc/min/mmHg record		☐☐☐	☐☐☐	70-72
23. Arterial blood gas	pCO_2 mmHg		☐☐	73-74
	pO_2 mmHg		☐☐☐	75-77
	hemoglobin		☐☐	78-79

card number two

☐☐☐☐ 1-4

Identification Number

Information source and number of exposures (5th-7th exposures)

	1st year Exposed	Frequency and Duration of exposure	Degree of Exposure	Occupation	Time Exposed	
5th exposure	☐☐	☐	☐	☐	☐☐	5-11
6th exposure	☐☐	☐	☐	☐	☐☐	12-18
7th exposure	☐☐	☐	☐	☐	☐☐	19-25

If both information source types are used, please record the information from the A-type form, below (there will be a 5 in column 14).

	1st year Exposed	Frequency/duration of exposure	Degree of Exposure	Occu-pation	Time Exposed	
1st exposure	☐☐	☐	☐	☐	☐☐	40-46
2nd exposure	☐☐	☐	☐	☐	☐☐	47-53
3rd exposure	☐☐	☐	☐	☐	☐☐	54-60
4th exposure	☐☐	☐	☐	☐	☐☐	61-67
5th exposure	☐☐	☐	☐	☐	☐☐	68-74

Senator **Nickles**. We very much appreciate your cooperation in being so timely and brief this afternoon. Thank you very much.

We will adjourn the meeting.

[Whereupon, at 1:45 p.m., the subcommittee was adjourned.]

○